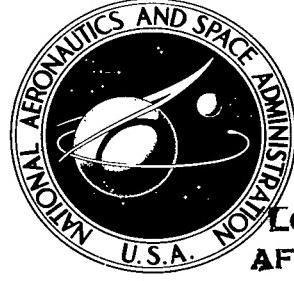


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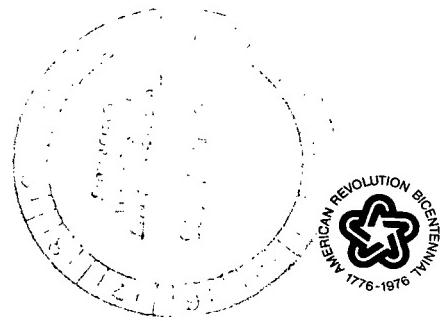
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TABULATION OF HYBRID THEORY CALCULATED $e\text{-N}_2$ VIBRATIONAL AND ROTATIONAL CROSS SECTIONS

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16. Abstract Vibrational excitation cross sections of N ₂ by electron impact are tabulated. Integrated cross sections are given for transitions v → v' where 0 ≤ v' ≤ 8 in the energy range 0.1 eV ≤ E ≤ 10 eV. The energy grid is chosen to be most dense in the resonance region (2 to 4 eV) so that the substructure is present in the numerical results. Coefficients in the angular distribution formula (differential scattering cross section) for transitions v = 0 → v' ≤ 8 are also numerically given over the same grid of energies. Simultaneous rotation-vibration coefficients are also given for transitions v = 0, j = 0; 1 → v' = 0, j = 0, 2, 4; 1, 3, 5. All results are obtained from the hybrid theory developed and calculated previously by the authors.			
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TABULATION OF HYBRID THEORY CALCULATED e-N₂ VIBRATIONAL AND ROTATIONAL CROSS SECTIONS

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PREFACE TO TABLES

This document contains a tabulation of electron-nitrogen molecule (e-N₂) cross sections taken from the hybrid-theory calculation (Reference 1) of this process. The method and partial results (mostly in graphical form) were presented in the original papers (Reference 1), but, because of their relevance to upper atmospheric physics, laser technology, and other applications, numerical results are presented here, including transition cross sections for higher vibrational states up to v = 8.

The basic formulas for tables 1 and 2 are the rotationally averaged (i.e., averaged over initial rotational states and summed over final rotational states) differential cross sections (table 2)

$$\frac{d\sigma_{v \rightarrow v'}}{d\Omega'} = \frac{k_{v'}}{4\pi k_v} \sum_L A_L(v \rightarrow v') P_L(\cos \theta') \quad (1)$$

and integrated cross section (table 1)

$$\sigma_{v \rightarrow v'} = \frac{k_{v'}}{k_v} A_0(v \rightarrow v') \quad (2)$$

where

$$A_L(v \rightarrow v') = (2L+1) \sum [(2\ell_i + 1)(2\lambda_i + 1)]^{1/2} a_{\ell_i \lambda_i L} a_{\ell_j \lambda_j L}^* \times \begin{pmatrix} \ell_i & \lambda_i & L \\ 0 & 0 & 0 \end{pmatrix} \begin{pmatrix} \ell_j & \lambda_j & L \\ 0 & 0 & 0 \end{pmatrix} \begin{pmatrix} \ell_i & \lambda_i & L \\ m\mu - (m+\mu) & & \end{pmatrix} \begin{pmatrix} \ell_j & \lambda_j & L \\ m\mu - (m+\mu) & & \end{pmatrix} \quad (3)$$

The arrow notation is used in order to make the initial and final states completely clear. For theoretical purposes, it is customary to separate initial and final states by a comma and to place the initial state on the right as in Reference 1. Thus

$$A_L(v \rightarrow v') = A_L(v', v) \quad (3')$$

with a similar understanding for the analogous quantities that follow (for example, equation 8 and those that follow).

The basic dynamical quantities in the foregoing equations are the scattering parameters, $a_{\ell\lambda m}$. In the hybrid theory (Reference 1), these parameters are determined from vibrational close-coupling equations for the resonant partial wave ($\Pi_g \Rightarrow |m|=1$, even parity (g)). Although the parity index is not explicitly indicated in equation 3, it is assumed to be there, and the sum in equation 3 must include both g and u parities. For all other partial waves, the scattering is determined from the adiabatic-nuclei theory. (See Reference 1 for further references.) Explicitly, then, for Π_g ,

$$a_{\ell\lambda m} \rightarrow a_{v'\ell,v\lambda} \quad (4)$$

where the right-hand sides (rhs) are matrix elements derived from the appropriate set of close-coupling equations; for non- Π_g ,

$$a_{\ell\lambda m} \rightarrow \langle v' | a_{\ell\lambda m} (R) | v \rangle \quad (5)$$

In equation 5, the rhs are integral over fixed-nuclei amplitudes calculated as a function of the internuclear separation (R):

$$\langle v' | a_{\ell\lambda m} (R) | v \rangle = \int_0^{\infty} \chi_{v'} (R) a_{\ell\lambda m} (R) \chi_v (R) R^2 dR \quad (6)$$

where χ_v are vibrational functions of N_2 .

All of the scattering parameters were calculated in Reference 1. In particular, the close-coupling portion of the calculation included nine states ($v_{max} = 8$), where three angular momenta $\ell, \lambda = 2, 46$ were simultaneously coupled (i.e., a total of 27 coupled equations). Thus, results can be obtained for all transitions $0 \leq v \leq v' \leq 8$. Superelastic cross sections $8 \geq v > v' \geq 0$ can also be inferred from detailed balancing:

$$\sigma_{v' \rightarrow v}(E) = \frac{k_v^2}{k_{v'}^2} \sigma_{v \rightarrow v'}(E) \quad (7a)$$

although superelastic cross sections are not explicitly included.

As is well known and comes about naturally from the close-coupling calculation, the impacting energies are related to each other for each fixed total energy (E):

$$E = k_v^2 + \epsilon_v = k_{v'}^2 + \epsilon_{v'} \quad (7b)$$

where $\epsilon_v (\epsilon_{v'})$ are the initial (final) vibrational energies of the N_2 molecule. This means that, for the excitation cross sections given in tables 1, 2, and 3, different initial states correspond .

to different impacting energies (k_v^2) for a fixed total energy (E). In all the tables, therefore, total energies (as originally determined) have been transformed, assuming scattering from the ground vibrational state:

$$E = k_0^2 + \epsilon_0 \quad (7c)$$

to the explicitly given k_v^2 using equation 7b.

The adiabatic-nuclei portion of the scattering amplitude is not intrinsically as uniquely defined with respect to the scattering energy as the close-coupling portion. This problem has been discussed elsewhere (Reference 2), but, as it applies here, it is clear that, for purely elastic scattering from the v^{th} vibrational state, the impacting energy should be the same k_v^2 as in equation 7b. Fortunately, the adiabatic-nuclei contributions to inelastic cross sections are rather negligible (because, in effect, $a_{\ell\lambda m}(R)$ are only very weakly dependent on R). Therefore, that contribution (for $v \neq v'$) has not been included, and the ambiguity in defining k^2 for the fixed-nuclei portion of the program has thereby been avoided. In fact, the adiabatic-nuclei amplitudes are not calculated for the k_v^2 given in all tables; however, because they vary slowly with E, only a simple interpolation was necessary and was used. (Note that this neglect of the inelastic adiabatic-nuclei contribution is not as justified for $E > 5$ eV; therefore, those tabulated cross sections will be less accurate. The question of accuracy is discussed in the next paragraph). The same insensitivity of $a_{\ell\lambda m}$ to R also permits replacing the integral in equation 6 for $v' = v$ with $a_{\ell\lambda m}(R_0)$, where $R_0 = 2.0680$ is the equilibrium separation of N_2 . This was done for all but the $0 \rightarrow 0$ cross section; in the latter case, a numerical quadrature corresponding to the rhs of equation 6 was performed.

The grid of energy was chosen to reveal the substructure of the various cross sections, which is concentrated in the range, $2 \leq E \leq 4$ eV. The observed substructure is more developed than the calculation outlined in Reference 1 reveals. As far as the present compilation is concerned, detailed shape as a function of E for $v \rightarrow v'$ cross sections gets poorer as v is increased. Nevertheless, for most applications, the average value is more important than the detailed shape, and the results should be accurate within a factor of two for $v \neq v'$ transitions. Note that, for the larger values of v, v', this estimated accuracy is increasingly uncertain. For elastic ($v = v'$) transitions, the percentage error should be smaller (≤ 40 percent), but, because these cross sections are larger than the inelastic cross sections, the absolute error may be comparable.

As can be seen from equation 2, the integrated cross section is proportional to $A_0(v', v)$, but the whole set of A_L is necessary for computing differential cross sections. Because of limitations (primarily of machine computer time), angular distributions of only those transitions originating from the ground vibrational state ($v = 0$) have been computed. Furthermore, $A_L(v', v)$ are given rather than $d\sigma_{v \rightarrow v'}/d\Omega'$ because they may be of more use for theoretical comparison and because only a simple calculation is necessary for obtaining the differential cross section, and it can be accurately calculated for any θ' , not just a predetermined grid. The final vibrational states range from $0 \leq v' \leq 8$, which corresponds

to the inclusion of three angular momentum states, $\ell = 2, 4, 6$, in addition to the nine vibrational states in the calculation (Reference 1). The compilation of $A_L (v \rightarrow v')$ constitutes table 2. Note that the units of $A_L (v \rightarrow v')$ are the theoretical ones. That is, when being used in equations 1 and 2 to compute cross sections, the cross sections will be in units of Bohr radii squared (a_0^2) in contrast to table 1.

Finally, a sample of simultaneous rotation-vibration cross section has also been calculated and graphically presented in Reference 3. The relevant formulas are given in Reference 1, and, although somewhat more extended, they also depend on the same scattering parameters, $a_{\ell \lambda m}$, as those of the present rotationally averaged results.

Specifically,

$$\frac{d\sigma_{v,j} \rightarrow v',j'}{d\Omega'} = \frac{k_{v',j'}}{k_{vj}} \sum_L A_L (vj \rightarrow v',j') P_L (\cos \theta') \quad (8)$$

and

$$\sigma_{v,j \rightarrow v',j'} = \frac{k_{v',j'}}{k_{vj}} A_0 (vj \rightarrow v',j') \quad (9)$$

This notation is similarly revised from Reference 1

$$A_L (vj \rightarrow v',j') = A_L (v',j',vj) \quad (10)$$

and the A_L are related to the same $a_{\ell \lambda m}$ in the foregoing by

$$A_L (vj \rightarrow v',j') = (2L + 1) (2j' + 1) \sum (-1)^{\ell_j + \lambda_j + m + \mu} [(\ell_i + 1) (2\lambda_i + 1)]^{1/2} a_{\ell_i \ell_j m} a_{\lambda_i \lambda_j m} \begin{pmatrix} \ell_i & \lambda_i & L \\ 0 & 0 & 0 \end{pmatrix} \quad (11)$$

$$\begin{pmatrix} \ell_j & \lambda_j & L \\ 0 & 0 & 0 \end{pmatrix} \sum_J (-1)^J (2J + 1) \begin{pmatrix} \ell_i & \ell_j & J \\ m - m & 0 & 0 \end{pmatrix} \begin{pmatrix} \lambda_i & \lambda_j & J \\ \mu - \mu & 0 & 0 \end{pmatrix}$$

$$\begin{pmatrix} j' & j & J^2 \\ 0 & 0 & 0 \end{pmatrix} \left\{ \begin{array}{l} \ell_i \lambda_i L \\ \lambda_j \ell_j J \end{array} \right\}$$

The same remarks concerning energy and superelasticity hold, changing things appropriately, as those for the foregoing rotationally averaged cross sections. In particular, the energies are related by

$$k_{vj}^2 + \epsilon_{vj} = k_{v'j'}^2 + \epsilon_{v'j'} \quad (12)$$

with ϵ_{vj} being the energy of N_2 in the j^{th} rotational and v^{th} vibrational state. The impacting energies given in table 3 are therefore

$$k_{vj}^2 = E - \epsilon_{vj} \quad (13)$$

where

$$E = k_0^2 + \epsilon_{00} \quad (14)$$

and k_0^2 is the impacting energy.

Reciprocity also applies to the differential cross section which, from its vibration-rotation generalization of equation 6, yields

$$\frac{d\sigma_{v'j' \rightarrow vj}/d\Omega'}{k_{v'j'}^2} = \frac{k_{vj}^2}{k_{vj}^2} \frac{d\sigma_{vj \rightarrow v'j'}/d\Omega'}{k_{vj}^2} \quad (15)$$

Table 3 contains entries for $v = v' = 0$ and $j = 0, 1$ and $j = 0, 2, 4; 1, 3, 5$ corresponding to the selection rule $\Delta j = \text{even}$. Furthermore, only the A_L are given; the total cross sections may be recovered from equation 9. The units correspond to a_0^2 as in table 2. The rotational and vibrational energies are given by

$$\epsilon_{vj} = (v + \frac{1}{2}) \hbar \omega_v + j(j+1) B \quad (16a)$$

$$\epsilon_v = (v + \frac{1}{2}) \hbar \omega_v \quad (16b)$$

with

$$\hbar \omega_v = 0.2925 \text{ eV} \quad (17)$$

$$B = 2.48 \times 10^{-4} \text{ eV} \quad (18)$$

Goddard Space Flight Center
 National Aeronautics and Space Administration
 Greenbelt, Maryland September 7, 1976



Table 1
Rotational Averaged Integrated Vibrational Cross Sections
(Units Angstrom squared (Å^2).)



$$\sigma_0 \rightarrow v' (\text{A}^2)$$

k_0^2 (eV)	0	1	2	3	v'	4	5	6	7	8
0.10	7.8625									
0.20	9.6734									
0.30	1.0743 ⁺¹	1.0904 ⁻⁸								
0.40	1.1446 ⁺¹	6.1738 ⁻⁶								
0.50	1.1934 ⁺¹	2.2964 ⁻⁵								
0.60	1.2295 ⁺¹	4.0464 ⁻⁵	2.1358 ⁻⁹							
0.70	1.2555 ⁺¹	1.0947 ⁻⁴	3.0761 ⁻⁷							
0.80	1.2751 ⁺¹	2.6128 ⁻⁴	1.6940 ⁻⁶							
0.90	1.2907 ⁺¹	5.5417 ⁻⁴	6.2119 ⁻⁶	1.4023 ⁻⁹						
1.00	1.3038 ⁺¹	1.1637 ⁻³	1.9346 ⁻⁵	1.0159 ⁻⁷						
1.10	1.3160 ⁺¹	2.3840 ⁻³	5.5362 ⁻⁵	6.3268 ⁻⁷						
1.20	1.3288 ⁺¹	4.8262 ⁻³	1.5059 ⁻⁴	2.8146 ⁻⁶	5.7722 ⁻¹⁰					
1.30	1.3441 ⁺¹	9.7874 ⁻³	4.0271 ⁻⁴	1.0873 ⁻⁵	3.9730 ⁻⁸					
1.40	1.3644 ⁺¹	2.0202 ⁻²	1.0875 ⁻³	4.0329 ⁻⁵	4.1912 ⁻⁷					
1.50	1.3947 ⁺¹	4.3261 ⁻²	3.0475 ⁻³	1.5188 ⁻⁴	3.0763 ⁻⁶	1.3331 ⁻⁹				
1.60	1.4444 ⁺¹	9.8640 ⁻²	9.1740 ⁻³	6.0851 ⁻⁴	2.0334 ⁻⁵	1.3142 ⁻⁷				
1.70	1.5357 ⁺¹	2.4957 ⁻¹	3.1234 ⁻²	2.7552 ⁻³	1.3731 ⁻⁴	2.3437 ⁻⁶				
1.80	1.7291 ⁺¹	7.5210 ⁻¹	1.3088 ⁻¹	1.5488 ⁻²	1.0903 ⁻³	3.3613 ⁻⁵	2.5083 ⁻⁸			
1.90	2.1943 ⁺¹	2.9332	7.4948 ⁻¹	1.2131 ⁻¹	1.1754 ⁻²	5.6366 ⁻⁴	4.7484 ⁻⁶			
2.00	2.2596 ⁺¹	7.4948	3.0926	7.0899 ⁻¹	9.3989 ⁻²	6.5375 ⁻³	1.4242 ⁻⁴			
2.05	1.7390 ⁺¹	5.7244	3.1897	8.8812 ⁻¹	1.3817 ⁻¹	1.1413 ⁻²	3.4353 ⁻⁴	2.3047 ⁻¹⁰		
2.10	1.5388 ⁺¹	3.5935	2.8897	9.9661 ⁻¹	1.8291 ⁻¹	1.7849 ⁻²	7.0345 ⁻⁴	8.3447 ⁻⁷		
2.15	1.6256 ⁺¹	2.2070	2.8337	1.2435	2.7130 ⁻¹	3.1196 ⁻²	1.5561 ⁻³	7.5711 ⁻⁶		
2.20	1.9594 ⁺¹	1.3064	3.0628	1.7763	4.6567 ⁻¹	6.3067 ⁻²	3.8875 ⁻³	4.0823 ⁻⁵		
2.25	2.5613 ⁺¹	8.6358 ⁻¹	3.3362	2.7050	8.6467 ⁻¹	1.3816 ⁻¹	1.0348 ⁻²	1.8206 ⁻⁴		
2.30	3.0458 ⁺¹	1.3927	2.8060	3.4734	1.3812	2.6139 ⁻¹	2.3514 ⁻²	6.0945 ⁻⁴		
2.35	2.6988 ⁺¹	2.6608	1.3552	2.9613	1.5062	3.3972 ⁻¹	3.6417 ⁻²	1.2865 ⁻³	2.3398 ⁻⁸	
2.40	2.0771 ⁺¹	3.5184	4.1621 ⁻¹	1.9721	1.3350	3.6215 ⁻¹	4.6043 ⁻²	2.1084 ⁻³	2.5747 ⁻⁶	
2.45	1.7055 ⁺¹	4.0138	1.8830 ⁻¹	1.2857	1.2293	4.0616 ⁻¹	6.1119 ⁻²	3.5088 ⁻³	1.4835 ⁻⁵	
2.50	1.5984 ⁺¹	4.4190	4.3101 ⁻¹	8.5041 ⁻¹	1.2630	5.1706 ⁻¹	9.2116 ⁻²	6.4753 ⁻³	5.5248 ⁻⁵	
2.55	1.7562 ⁺¹	4.6260	1.1510	5.1398 ⁻¹	1.3965	7.2535 ⁻¹	1.5336 ⁻¹	1.2979 ⁻²	1.7764 ⁻⁴	
2.60	2.1602 ⁺¹	3.9978	2.2790	2.1929 ⁻¹	1.4356	9.7800 ⁻¹	2.4657 ⁻¹	2.4820 ⁻²	4.8378 ⁻⁴	
2.65	2.4449 ⁺¹	2.3097	2.9321	9.3242 ⁻²	1.0958	1.0273	3.1107 ⁻¹	3.6924 ⁻²	9.5166 ⁻⁴	
2.70	2.3125 ⁺¹	1.0321	2.5644	1.9456 ⁻¹	6.0198 ⁻¹	8.3571 ⁻¹	3.0697 ⁻¹	4.2713 ⁻²	1.3871 ⁻³	
2.75	2.0331 ⁺¹	7.8974 ⁻¹	1.8949	3.8130 ⁻¹	2.7601 ⁻¹	6.3950 ⁻¹	2.8886 ⁻¹	4.6934 ⁻²	1.8570 ⁻³	
2.80	1.8059 ⁺¹	1.1822	1.3356	5.9324 ⁻¹	1.0829 ⁻¹	5.1724 ⁻¹	2.9255 ⁻¹	5.5392 ⁻²	2.6063 ⁻³	
2.85	1.6734 ⁺¹	1.9351	9.0111 ⁻¹	8.3708 ⁻¹	3.2981 ⁻²	4.4703 ⁻¹	3.2440	7.1529 ⁻²	3.9311 ⁻³	
2.90	1.6543 ⁺¹	2.8348	5.4941 ⁻¹	1.0868	2.6613 ⁻²	3.8950 ⁻¹	3.7478 ⁻¹	9.6327 ⁻²	6.0996 ⁻³	
2.95	1.7492 ⁺¹	3.3658	3.0953 ⁻¹	1.2011	8.7842 ⁻²	3.0275 ⁻¹	4.0450 ⁻¹	1.2145 ⁻¹	8.7686 ⁻³	
3.00	1.8644 ⁺¹	2.9789	2.5789 ⁻¹	1.0323	1.8097 ⁻¹	1.8507 ⁻¹	3.6714 ⁻¹	1.2929 ⁻¹	1.0551 ⁻²	
3.10	1.8412 ⁺¹	1.2355	4.7212 ⁻¹	4.2903 ⁻¹	2.7596 ⁻¹	3.3603 ⁻²	2.1304 ⁻¹	1.0478 ⁻¹	1.0742 ⁻²	
3.20	1.6979 ⁺¹	5.6142 ⁻¹	6.6274 ⁻¹	1.3515 ⁻¹	2.9937 ⁻¹	4.3546 ⁻³	1.3140 ⁻¹	9.3362 ⁻²	1.1821 ⁻²	
3.30	1.6098 ⁺¹	7.4470 ⁻¹	7.2493 ⁻¹	5.0462 ⁻²	3.0225 ⁻¹	2.1575 ⁻²	9.0553 ⁻²	9.7882 ⁻²	1.5155 ⁻²	
3.40	1.6044 ⁺¹	1.0978	5.0185 ⁻¹	8.4090 ⁻²	2.1828 ⁻¹	5.2917 ⁻²	4.8951 ⁻²	8.7286 ⁻²	1.6427 ⁻²	
3.50	1.6055 ⁺¹	9.4227 ⁻¹	2.0990 ⁻¹	1.2461 ⁻¹	9.9902 ⁻²	6.1560 ⁻²	1.7318 ⁻²	5.8127 ⁻²	1.3263 ⁻²	
3.60	1.5773 ⁺¹	6.2678 ⁻¹	9.3161 ⁻²	1.2934 ⁻¹	3.7315 ⁻²	5.6435 ⁻²	4.7782 ⁻³	3.7886 ⁻²	1.0482 ⁻²	
3.70	1.5427 ⁺¹	4.1687 ⁻¹	8.5818 ⁻²	1.1889 ⁻¹	1.3382 ⁻²	5.0921 ⁻²	1.1006 ⁻³	2.7612 ⁻²	9.2831 ⁻³	
3.80	1.5141 ⁺¹	3.2685 ⁻¹	1.1661 ⁻¹	9.6402 ⁻²	7.1628 ⁻³	4.3931 ⁻²	8.0091 ⁻⁴	2.0995 ⁻²	8.6140 ⁻³	
3.90	1.4948 ⁺¹	3.1085 ⁻¹	1.3100 ⁻¹	6.1501 ⁻²	8.9162 ⁻³	3.1809 ⁻²	1.7859 ⁻³	1.4324 ⁻²	7.2183 ⁻³	
4.00	1.4812 ⁺¹	2.9618 ⁻¹	1.0795 ⁻¹	3.0478 ⁻²	1.1269 ⁻²	1.8565 ⁻²	2.5752 ⁻³	8.3384 ⁻³	5.2048 ⁻³	
4.50	1.4254 ⁺¹	1.3083 ⁻¹	2.1080 ⁻²	7.5952 ⁻³	5.0951 ⁻³	6.0798 ⁻⁴	1.8046 ⁻³	4.6744 ⁻⁴	1.0669 ⁻³	
5.00	1.3940 ⁺¹	7.2380 ⁻²	8.8357 ⁻³	1.7541 ⁻³	3.6004 ⁻⁴	2.0143 ⁻⁴	2.2287 ⁻⁴	9.5187 ⁻⁶	1.2461 ⁻⁴	
5.50	1.3752 ⁺¹	4.4569 ⁻²	3.7379 ⁻³	4.8813 ⁻⁴	1.1238 ⁻⁴	5.0824 ⁻⁵	1.5117 ⁻⁵	2.8906 ⁻⁶	1.2860 ⁻⁵	
6.00	1.3636 ⁺¹	3.0288 ⁻²	1.9243 ⁻³	1.7712 ⁻⁴	2.6069 ⁻⁵	5.9038 ⁻⁶	1.0603 ⁻⁶	7.5328 ⁻⁷	1.0157 ⁻⁶	
6.50	1.3563 ⁺¹	2.2004 ⁻²	1.1208 ⁻³	7.4510 ⁻⁵	7.2630 ⁻⁶	1.1698 ⁻⁶	2.3021 ⁻⁷	1.0908 ⁻⁷	7.7473 ⁻⁸	
7.00	1.3518 ⁺¹	1.6765 ⁻²	7.1721 ⁻⁴	3.6377 ⁻⁵	2.5811 ⁻⁶	3.1697 ⁻⁷	4.5278 ⁻⁸	8.9898 ⁻⁹	5.8025 ⁻⁹	
7.50	1.3494 ⁺¹	1.3228 ⁻²	4.9221 ⁻⁴	1.9851 ⁻⁵	1.1105 ⁻⁶	1.0844 ⁻⁷	1.2235 ⁻⁸	6.2181 ⁻¹⁰	1.1355 ⁻⁹	
8.00	1.3484 ⁺¹	1.0718 ⁻²	3.5629 ⁻⁴	1.1800 ⁻⁵	5.7237 ⁻⁷	4.8089 ⁻⁸	6.1675 ⁻⁹	3.8517 ⁻¹¹	6.6896 ⁻¹⁰	
9.00	1.3493 ⁺¹	7.4543 ⁻³	2.0987 ⁻⁴	5.0418 ⁻⁶	2.4623 ⁻⁷	1.7253 ⁻⁸	4.4013 ⁻⁹	8.4035 ⁻¹¹	5.6551 ⁻¹⁰	
10.00	1.3521 ⁺¹	5.4727 ⁻³	1.3813 ⁻⁴	2.5925 ⁻⁶	1.6640 ⁻⁷	9.5346 ⁻⁹	4.1654 ⁻⁹	9.4453 ⁻¹¹	5.4647 ⁻¹⁰	

$\sigma_{1 \rightarrow v'} (\text{A}^2)$

k_0^2 (eV)	k_1^2 (eV)		v'							
		1	2	3	4	5	6	7	8	
0.40	0.1075	8.1229								
0.50	0.2075	9.8960								
0.60	0.3075	1.0921 ⁺¹	1.4041 ⁻⁷							
0.70	0.4075	1.1606 ⁺¹	1.1522 ⁻⁵							
0.80	0.5075	1.2082 ⁺¹	4.0124 ⁻⁵							
0.90	0.6075	1.2434 ⁺¹	1.2151 ⁻⁴	6.2990 ⁻⁹						
1.00	0.7075	1.2689 ⁺¹	3.1142 ⁻⁴	6.9371 ⁻⁷						
1.10	0.8075	1.2884 ⁺¹	6.9711 ⁻⁴	5.2197 ⁻⁶						
1.20	0.9075	1.3043 ⁺¹	1.5799 ⁻³	2.3220 ⁻⁵	1.2687 ⁻⁸					
1.30	1.0075	1.3187 ⁺¹	3.4860 ⁻³	8.2653 ⁻⁵	6.2239 ⁻⁷					
1.40	1.1075	1.3335 ⁺¹	7.6530 ⁻³	2.6602 ⁻⁴	4.3277 ⁻⁶					
1.50	1.2075	1.3520 ⁺¹	1.7173 ⁻²	8.3079 ⁻⁴	2.1753 ⁻⁵	7.0349 ⁻⁹				
1.60	1.3075	1.3798 ⁺¹	4.0548 ⁻²	2.6583 ⁻³	1.0125 ⁻⁴	5.1858 ⁻⁷				
1.70	1.4075	1.4308 ⁺¹	1.0533 ⁻¹	9.2677 ⁻³	4.9098 ⁻⁴	7.3888 ⁻⁶				
1.80	1.5075	1.5489 ⁺¹	3.2527 ⁻¹	3.8533 ⁻²	2.7798 ⁻³	8.1280 ⁻⁵	6.1779 ⁻⁸			
1.90	1.6075	1.8955 ⁺¹	1.3143	2.1305 ⁻¹	2.0781 ⁻²	9.8115 ⁻⁴	8.3206 ⁻⁶			
2.00	1.7075	2.1975 ⁺¹	3.6254	8.3105 ⁻¹	1.1012 ⁻¹	7.6699 ⁻³	1.6697 ⁻⁴			
2.05	1.7575	1.8170 ⁺¹	2.9864	8.3042 ⁻¹	1.2897 ⁻¹	1.0707 ⁻²	3.2139 ⁻⁴	2.1469 ⁻¹⁰		
2.10	1.8075	1.5420 ⁺¹	2.1261	7.3134 ⁻¹	1.3393 ⁻¹	1.3158 ⁻²	5.1663 ⁻⁴	6.0968 ⁻⁷		
2.15	1.8575	1.4109 ⁺¹	1.6154	7.0611 ⁻¹	1.5375 ⁻¹	1.7802 ⁻²	8.8449 ⁻⁴	4.2828 ⁻⁶		
2.20	1.9075	1.3519 ⁺¹	1.3434	7.7508 ⁻¹	2.0288 ⁻¹	2.7651 ⁻²	1.6981 ⁻³	1.7763 ⁻⁵		
2.25	1.9575	1.3343 ⁺¹	1.1367	9.1574 ⁻¹	2.9245 ⁻¹	4.6973 ⁻²	3.5073 ⁻³	6.1590 ⁻⁵		
2.30	2.0075	1.3520 ⁺¹	7.7420 ⁻¹	9.5034 ⁻¹	3.7776 ⁻¹	7.1782 ⁻²	6.4412 ⁻³	1.6664 ⁻⁴		
2.35	2.0575	1.3811 ⁺¹	3.3047 ⁻¹	7.1288 ⁻¹	3.6262 ⁻¹	8.2048 ⁻²	8.7783 ⁻³	3.0970 ⁻⁴	5.6452 ⁻⁹	
2.40	2.1075	1.4019 ⁺¹	1.0203 ⁻¹	4.7154 ⁻¹	3.1938 ⁻¹	8.6859 ⁻²	1.1026 ⁻²	5.0445 ⁻⁴	6.1706 ⁻⁷	
2.45	2.1575	1.4264 ⁺¹	5.2031 ⁻²	3.4447 ⁻¹	3.2974 ⁻¹	1.0915 ⁻¹	1.6407 ⁻²	9.4136 ⁻⁴	3.9915 ⁻⁶	
2.50	2.2075	1.4633 ⁺¹	1.4202 ⁻¹	2.7762 ⁻¹	4.1300 ⁻¹	1.6927 ⁻¹	3.0137 ⁻²	2.1179 ⁻³	1.8082 ⁻⁵	
2.55	2.2575	1.5066 ⁺¹	4.7904 ⁻¹	2.1274 ⁻¹	5.7923 ⁻¹	3.0096 ⁻¹	6.3626 ⁻²	5.3846 ⁻³	7.3773 ⁻⁵	
2.60	2.3075	1.5161 ⁺¹	1.2146	1.1603 ⁻¹	7.6212 ⁻¹	5.1891 ⁻¹	1.3088 ⁻¹	1.3177 ⁻²	2.5679 ⁻⁴	
2.65	2.3575	1.4504 ⁺¹	1.9881	6.2267 ⁻²	7.3914 ⁻¹	6.9203 ⁻¹	2.0973 ⁻¹	2.4901 ⁻²	6.4140 ⁻⁴	
2.70	2.4075	1.3855 ⁺¹	2.1811	1.6296 ⁻¹	5.0868 ⁻¹	7.0478 ⁻¹	2.5920 ⁻¹	3.6075 ⁻²	1.1706 ⁻³	
2.75	2.4575	1.3916 ⁺¹	1.9891	3.9452 ⁻¹	2.8752 ⁻¹	6.6446 ⁻¹	3.0056 ⁻¹	4.8846 ⁻²	1.9313 ⁻³	
2.80	2.5075	1.4696 ⁺¹	1.7030	7.4553 ⁻¹	1.3689 ⁻¹	6.5177 ⁻¹	3.6917 ⁻¹	6.9911 ⁻²	3.2874 ⁻³	
2.85	2.5575	1.6192 ⁺¹	1.3756	1.2585	4.9863 ⁻²	6.7320 ⁻¹	4.8914 ⁻¹	1.0787 ⁻¹	5.9255 ⁻³	
2.90	2.6075	1.8280 ⁺¹	9.9168 ⁻¹	1.9285	4.7355 ⁻²	6.9176 ⁻¹	6.6625 ⁻¹	1.7125 ⁻¹	1.0841 ⁻²	
2.95	2.6575	2.0014 ⁺¹	6.5416 ⁻¹	2.4858	1.8194 ⁻¹	6.2665 ⁻¹	8.3764 ⁻¹	2.5151 ⁻¹	1.8157 ⁻²	
3.00	2.7075	1.9880 ⁺¹	6.2952 ⁻¹	2.4653	4.3205 ⁻¹	4.4176 ⁻¹	8.7621 ⁻¹	3.0846 ⁻¹	2.5184 ⁻²	
3.10	2.8075	1.6408 ⁺¹	1.4803	1.3279	8.5149 ⁻¹	1.0388 ⁻¹	6.5694 ⁻¹	3.2311 ⁻¹	3.3136 ⁻²	
3.20	2.9075	1.4914 ⁺¹	2.5982	5.2642 ⁻¹	1.1578	1.6838 ⁻²	5.0788 ⁻¹	3.6085 ⁻¹	4.5709 ⁻²	
3.30	3.0075	1.6348 ⁺¹	3.4678	2.4102 ⁻¹	1.4296	1.0180 ⁻¹	4.2804 ⁻¹	4.6272 ⁻¹	7.1667 ⁻²	
3.40	3.1075	1.8848 ⁺¹	2.8697	4.7943 ⁻¹	1.2375	2.9994 ⁻¹	2.7741 ⁻¹	4.9469 ⁻¹	9.3107 ⁻²	
3.50	3.2075	1.8690 ⁺¹	1.4131	8.3826 ⁻¹	6.6773 ⁻¹	4.1191 ⁻¹	1.1575 ⁻¹	3.8847 ⁻¹	8.8618 ⁻²	
3.60	3.3075	1.7211 ⁺¹	7.3469 ⁻¹	1.0131	2.8998 ⁻¹	4.3945 ⁻¹	3.7153 ⁻²	2.9446 ⁻¹	8.1420 ⁻²	
3.70	3.4075	1.6094 ⁺¹	7.8482 ⁻¹	1.0712	1.1952 ⁻¹	4.5589 ⁻¹	9.8421 ⁻³	2.4667 ⁻¹	8.2864 ⁻²	
3.80	3.5075	1.5722 ⁺¹	1.2084	9.8883 ⁻¹	7.2834 ⁻²	4.4754 ⁻¹	8.1363 ⁻³	2.1341 ⁻¹	8.7491 ⁻²	
3.90	3.6075	1.5942 ⁺¹	1.5185	7.1181 ⁻¹	1.0231 ⁻¹	3.6542 ⁻¹	2.0470 ⁻²	1.6427 ⁻¹	8.2720 ⁻²	
4.00	3.7075	1.6126 ⁺¹	1.3884	3.9526 ⁻¹	1.4475 ⁻¹	2.3863 ⁻¹	3.3077 ⁻²	1.0707 ⁻¹	6.6813 ⁻²	
4.50	4.2075	1.4967 ⁺¹	4.2517 ⁻¹	1.6077 ⁻¹	1.0586 ⁻¹	1.2481 ⁻²	3.7723 ⁻²	9.7188 ⁻³	2.2296 ⁻²	
5.00	4.7075	1.4438 ⁺¹	2.4820 ⁻¹	5.3515 ⁻²	1.0935 ⁻²	6.0809 ⁻³	6.9309 ⁻³	2.8990 ⁻⁴	3.8796 ⁻³	
5.50	5.2075	1.4088 ⁺¹	1.3524 ⁻¹	2.0260 ⁻²	4.7391 ⁻³	2.1106 ⁻³	6.6653 ⁻⁴	1.2243 ⁻⁴	5.6211 ⁻⁴	
6.00	5.7075	1.3880 ⁺¹	8.5080 ⁻²	9.4956 ⁻³	1.4695 ⁻³	3.1952 ⁻⁴	6.4897 ⁻⁵	4.4046 ⁻⁵	5.8694 ⁻⁵	
6.50	6.2075	1.3751 ⁺¹	5.8195 ⁻²	4.9779 ⁻³	5.2535 ⁻⁴	7.8343 ⁻⁵	1.8718 ⁻⁵	9.0070 ⁻⁶	5.3119 ⁻⁶	
7.00	6.7075	1.3670 ⁺¹	4.2450 ⁻²	2.9477 ⁻³	2.2929 ⁻⁴	2.4926 ⁻⁵	4.6167 ⁻⁶	1.1865 ⁻⁶	3.4872 ⁻⁷	
7.50	7.2075	1.3619 ⁺¹	3.2437 ⁻²	1.9084 ⁻³	1.1426 ⁻⁴	9.2166 ⁻⁶	1.2646 ⁻⁶	1.9239 ⁻⁷	2.4188 ⁻⁶	
8.00	7.7075	1.3589 ⁺¹	2.5651 ⁻²	1.3209 ⁻³	6.3186 ⁻⁵	4.0500 ⁻⁶	4.4864 ⁻⁷	4.8676 ⁻⁸	1.3407 ⁻⁹	
9.00	8.7075	1.3571 ⁺¹	1.7246 ⁻²	7.3017 ⁻⁴	2.4297 ⁻⁵	1.2778 ⁻⁶	1.1519 ⁻⁷	1.4864 ⁻⁶	5.4579 ⁻¹⁰	
10.00	9.7075	1.3583 ⁺¹	1.2383 ⁻²	4.6044 ⁻⁴	1.1626 ⁻⁵	6.9135 ⁻⁷	5.4053 ⁻⁸	1.1963 ⁻⁸	7.5403 ⁻¹⁰	

$$\sigma_2 \rightarrow v' (\text{A}^2)$$

k_0^2 (eV)	k_2^2 (eV)		2	3	4	v'	5	6	7	8
0.70	0.1149	8.2713								
0.80	0.2149	9.9966								
0.90	0.3149	1.0980^{+1}	7.4424^{-7}							
1.00	0.4149	1.1649^{+1}	2.3394^{-5}							
1.10	0.5149	1.2113^{+1}	7.5837^{-5}							
1.20	0.6149	1.2460^{+1}	2.5980^{-4}	2.5012^{-8}						
1.30	0.7149	1.2712^{+1}	6.1647^{-4}	1.8280^{-6}						
1.40	0.8149	1.2910^{+1}	1.5122^{-3}	1.4491^{-5}						
1.50	0.9149	1.3082^{+1}	3.6195^{-3}	7.0494^{-5}	7.1773^{-8}					
1.60	1.0149	1.3257^{+1}	8.7823^{-3}	2.8515^{-4}	2.7954^{-6}					
1.70	1.1149	1.3487^{+1}	2.2616^{-2}	1.1023^{-3}	2.2087^{-5}					
1.80	1.2149	1.3906^{+1}	6.6056^{-2}	4.5800^{-3}	1.5354^{-4}	9.4245^{-8}				
1.90	1.3149	1.4970^{+1}	2.3818^{-1}	2.2898^{-2}	1.1349^{-3}	8.8076^{-6}				
2.00	1.4149	1.5801^{+1}	5.6268^{-1}	7.4418^{-2}	5.2198^{-3}	1.1202^{-4}				
2.05	1.4649	1.4788^{+1}	4.4590^{-1}	6.9298^{-2}	5.7424^{-3}	1.7274^{-4}	1.1548^{-10}			
2.10	1.5149	1.4167^{+1}	3.4731^{-1}	6.3695^{-2}	6.2287^{-3}	2.4608^{-4}	2.9030^{-7}			
2.15	1.5649	1.4024^{+1}	3.6923^{-1}	8.0491^{-2}	9.2802^{-3}	4.6280^{-4}	2.2448^{-6}			
2.20	1.6149	1.4170^{+1}	5.6253^{-1}	1.4739^{-1}	2.0003^{-2}	1.2321^{-3}	1.2916^{-5}			
2.25	1.6649	1.4438^{+1}	1.0333	3.3026^{-1}	5.2783^{-2}	3.9612^{-3}	6.9578^{-5}			
2.30	1.7149	1.4366^{+1}	1.6381	6.5145^{-1}	1.2310^{-1}	1.1128^{-2}	2.8734^{-4}			
2.35	1.7649	1.3746^{+1}	1.6839	8.5632^{-1}	1.9264^{-1}	2.0780^{-2}	7.3088^{-4}	1.3229^{-8}		
2.40	1.8149	1.3308^{+1}	1.3019	8.8050^{-1}	2.3813^{-1}	3.0496^{-2}	1.3902^{-3}	1.6888^{-6}		
2.45	1.8649	1.3273^{+1}	9.4748^{-1}	9.0412^{-1}	2.9782^{-1}	4.5123^{-2}	2.5802^{-3}	1.4590^{-6}		
2.50	1.9149	1.3580^{+1}	6.7479^{-1}	9.9850^{-1}	4.0770^{-1}	7.3050^{-2}	5.1191^{-3}	4.3520^{-5}		
2.55	1.9649	1.4265^{+1}	4.2537^{-1}	1.1485	5.9531^{-1}	1.2641^{-1}	1.0675^{-2}	1.4588^{-4}		
2.60	2.0149	1.5189^{+1}	1.8455^{-1}	1.1939	8.1215^{-1}	2.0530^{-1}	2.0643^{-2}	4.0184^{-4}		
2.65	2.0649	1.5523^{+1}	7.8153^{-2}	9.0024^{-1}	8.4323^{-1}	2.5559^{-1}	3.0333^{-2}	7.8138^{-4}		
2.70	2.1149	1.4993^{+1}	1.5701^{-1}	4.8044^{-1}	6.6662^{-1}	2.4475^{-1}	3.4078^{-2}	1.1068^{-3}		
2.75	2.1649	1.4338^{+1}	2.9594^{-1}	2.1240^{-1}	4.9186^{-1}	2.2178^{-1}	3.6080^{-2}	1.4286^{-3}		
2.80	2.2149	1.3869^{+1}	4.4607^{-1}	8.0804^{-2}	3.8557^{-1}	2.1746^{-1}	4.1244^{-2}	1.9426^{-3}		
2.85	2.2649	1.3556^{+1}	6.2387^{-1}	2.4376^{-2}	3.3028^{-1}	2.3877^{-1}	5.2753^{-2}	2.9026^{-3}		
2.90	2.3149	1.3343^{+1}	8.3702^{-1}	2.0103^{-2}	2.9730^{-1}	2.8473^{-1}	7.3338^{-2}	4.6498^{-3}		
2.95	2.3649	1.3234^{+1}	1.0120	7.2573^{-2}	2.5263^{-1}	3.3558^{-1}	1.0099^{-1}	7.3005^{-3}		
3.00	2.4149	1.3292^{+1}	1.0117	1.7378^{-1}	1.7942^{-1}	3.5335^{-1}	1.2468^{-1}	1.0192^{-2}		
3.10	2.5149	1.3853^{+1}	6.5634^{-1}	4.1084^{-1}	5.0718^{-2}	3.1735^{-1}	1.5645^{-1}	1.6059^{-2}		
3.20	2.6149	1.4847^{+1}	3.5192^{-1}	7.4796^{-1}	1.1058^{-2}	3.2827^{-1}	2.3366^{-1}	2.9612^{-2}		
3.30	2.7149	1.6113^{+1}	2.2286^{-1}	1.2584	8.9809^{-2}	3.7676^{-1}	4.0759^{-1}	6.3131^{-2}		
3.40	2.8149	1.6177^{+1}	5.8128^{-1}	1.4562	3.5304^{-1}	3.2626^{-1}	5.8128^{-1}	1.0938^{-1}		
3.50	2.9149	1.4864^{+1}	1.3092	1.0216	6.2880^{-1}	1.7691^{-1}	5.9189^{-1}	1.3497^{-1}		
3.60	3.0149	1.4200^{+1}	1.9916	5.6158^{-1}	8.4614^{-1}	7.1862^{-2}	5.6592^{-1}	1.5642^{-1}		
3.70	3.1149	1.4733^{+1}	2.5875	2.8645^{-1}	1.0805	2.3549^{-2}	5.8368^{-1}	1.9602^{-1}		
3.80	3.2149	1.6305^{+1}	2.8727	2.1061^{-1}	1.2788	2.3339^{-2}	6.0911^{-1}	2.4967^{-1}		
3.90	3.3149	1.7813^{+1}	2.4426	3.4949^{-1}	1.2372	6.9454^{-2}	5.5579^{-1}	2.7987^{-1}		
4.00	3.4149	1.7956^{+1}	1.5797	5.7750^{-1}	9.4331^{-1}	1.3123^{-1}	4.2323^{-1}	2.6413^{-1}		
4.50	3.9149	1.5477^{+1}	1.2042	7.8850^{-1}	9.1567^{-2}	2.7911^{-1}	7.1701^{-2}	1.6448^{-1}		
5.00	4.4149	1.5118^{+1}	6.0344^{-1}	1.2969^{-1}	7.1027^{-2}	8.1078^{-2}	3.4166^{-3}	4.5622^{-2}		
5.50	4.9149	1.4485^{+1}	3.1607^{-1}	8.1390^{-2}	3.5901^{-2}	1.1183^{-2}	2.1181^{-3}	9.6883^{-3}		
6.00	5.4149	1.4145^{+1}	1.8893^{-1}	3.3926^{-2}	7.4602^{-3}	1.4418^{-3}	1.0610^{-3}	1.4206^{-3}		
6.50	5.9149	1.3930^{+1}	1.1988^{-1}	1.5622^{-2}	2.4051^{-3}	5.3851^{-4}	2.9308^{-4}	1.7989^{-4}		
7.00	6.4149	1.3796^{+1}	8.2833^{-2}	8.4954^{-3}	9.7554^{-4}	1.6514^{-4}	5.1129^{-5}	1.7588^{-5}		
7.50	6.9149	1.3711^{+1}	6.0818^{-2}	5.1350^{-3}	4.4113^{-4}	5.2527^{-5}	1.0549^{-5}	2.2523^{-6}		
8.00	7.4149	1.3658^{+1}	4.6680^{-2}	3.3699^{-3}	2.2442^{-4}	1.9922^{-5}	2.9492^{-6}	4.2606^{-7}		
9.00	8.4149	1.3611^{+1}	3.0137^{-2}	1.7299^{-3}	7.6485^{-5}	4.7846^{-6}	5.2026^{-7}	6.0135^{-8}		
10.00	9.4149	1.3608^{+1}	2.1090^{-2}	1.0398^{-3}	3.3725^{-5}	2.0752^{-6}	1.9781^{-7}	3.5350^{-8}		

$\sigma_{3 \rightarrow v'}(A^2)$

k_0^2 (eV)	k_3^2 (eV)	3	4	v'	5	6	7	8
1.00	0.1224	8.4185						
1.10	0.2224	1.0092 ⁺¹						
1.20	0.3224	1.1038 ⁺¹	2.5853 ⁻⁶					
1.30	0.4224	1.1690 ⁺¹	4.0764 ⁻⁵					
1.40	0.5224	1.2144 ⁺¹	9.5168 ⁻⁵					
1.50	0.6224	1.2485 ⁺¹	4.6938 ⁻⁴	1.0915 ⁻⁷				
1.60	0.7224	1.2738 ⁺¹	1.2025 ⁻³	4.7788 ⁻⁶				
1.70	0.8224	1.2948 ⁺¹	3.1649 ⁻³	3.9647 ⁻⁵				
1.80	0.9224	1.3158 ⁺¹	8.8025 ⁻³	2.2769 ⁻⁴	3.3349 ⁻⁷			
1.90	1.0224	1.3455 ⁺¹	2.7643 ⁻²	1.2119 ⁻³	1.3449 ⁻⁵			
2.00	1.1224	1.3704 ⁺¹	6.1453 ⁻²	4.0899 ⁻³	1.0048 ⁻⁴			
2.05	1.1724	1.3661 ⁺¹	6.4725 ⁻²	5.1476 ⁻³	1.7109 ⁻⁴	1.0124 ⁻¹⁰		
2.10	1.2224	1.3748 ⁺¹	8.5939 ⁻²	8.1225 ⁻³	3.4635 ⁻⁴	3.6549 ⁻⁷		
2.15	1.2724	1.4010 ⁺¹	1.4795 ⁻¹	1.6632 ⁻²	8.7471 ⁻⁴	3.8971 ⁻⁶		
2.20	1.3224	1.4496 ⁺¹	2.9172 ⁻¹	3.8983 ⁻²	2.4771 ⁻³	2.4664 ⁻⁵		
2.25	1.3724	1.5211 ⁺¹	5.8549 ⁻¹	9.2984 ⁻²	7.0623 ⁻³	1.2140 ⁻⁴		
2.30	1.4224	1.5603 ⁺¹	9.4535 ⁻¹	1.7875 ⁻¹	1.6124 ⁻²	4.1651 ⁻⁴		
2.35	1.4724	1.4952 ⁺¹	9.8078 ⁻¹	2.2179 ⁻¹	2.3675 ⁻²	8.4463 ⁻⁴	1.5257 ⁻⁸	
2.40	1.5224	1.4120 ⁺¹	7.8765 ⁻¹	2.1465 ⁻¹	2.7070 ⁻²	1.2608 ⁻³	1.5238 ⁻⁶	
2.45	1.5724	1.3635 ⁺¹	6.3759 ⁻¹	2.1179 ⁻¹	3.1562 ⁻²	1.8479 ⁻³	7.7365 ⁻⁶	
2.50	1.6224	1.3387 ⁺¹	5.7619 ⁻¹	2.3711 ⁻¹	4.1833 ⁻²	2.9975 ⁻³	2.5296 ⁻⁵	
2.55	1.6724	1.3248 ⁺¹	5.8693 ⁻¹	3.0618 ⁻¹	6.4165 ⁻²	5.5240 ⁻³	7.4954 ⁻⁵	
2.60	1.7224	1.3168 ⁺¹	6.1039 ⁻¹	4.1723 ⁻¹	1.0436 ⁻¹	1.0663 ⁻²	2.0617 ⁻⁴	
2.65	1.7724	1.3182 ⁺¹	5.2669 ⁻¹	4.9494 ⁻¹	1.4879 ⁻¹	1.7896 ⁻²	4.5802 ⁻⁴	
2.70	1.8224	1.3315 ⁺¹	3.5599 ⁻¹	4.9469 ⁻¹	1.8050 ⁻¹	2.5414 ⁻²	8.2029 ⁻⁴	
2.75	1.8724	1.3540 ⁺¹	2.0896 ⁻¹	4.8350 ⁻¹	2.1710 ⁻¹	3.5636 ⁻²	1.4029 ⁻³	
2.80	1.9224	1.3866 ⁺¹	1.0543 ⁻¹	5.0083 ⁻¹	2.8187 ⁻¹	5.3806 ⁻²	2.5221 ⁻³	
2.85	1.9724	1.4331 ⁺¹	4.0781 ⁻²	5.4481 ⁻¹	3.9383 ⁻¹	8.7355 ⁻²	4.7886 ⁻³	
2.90	2.0224	1.4901 ⁺¹	4.0162 ⁻²	5.8225 ⁻¹	5.5870 ⁻¹	1.4412 ⁻¹	9.1140 ⁻³	
2.95	2.0724	1.5291 ⁺¹	1.5698 ⁻¹	5.3973 ⁻¹	7.1984 ⁻¹	2.1642 ⁻¹	1.5624 ⁻²	
3.00	2.1224	1.5112 ⁺¹	3.7557 ⁻¹	3.8288 ⁻¹	7.5875 ⁻¹	2.6691 ⁻¹	2.1809 ⁻²	
3.10	2.2224	1.3946 ⁺¹	7.1953 ⁻¹	8.7224 ⁻²	5.5208 ⁻¹	2.7041 ⁻¹	2.7787 ⁻²	
3.20	2.3224	1.3296 ⁺¹	9.1366 ⁻¹	1.3219 ⁻²	3.9782 ⁻¹	2.8079 ⁻¹	3.5659 ⁻²	
3.30	2.4224	1.3160 ⁺¹	1.0566	7.4134 ⁻²	3.1343 ⁻¹	3.3601 ⁻¹	5.2175 ⁻²	
3.40	2.5224	1.3417 ⁺¹	9.2157 ⁻¹	2.1893 ⁻¹	2.0411 ⁻¹	3.6029 ⁻¹	6.7968 ⁻²	
3.50	2.6224	1.3795 ⁺¹	5.7780 ⁻¹	3.4649 ⁻¹	9.8474 ⁻²	3.2609 ⁻¹	7.4537 ⁻²	
3.60	2.7224	1.4227 ⁺¹	3.3973 ⁻¹	4.9319 ⁻¹	4.2445 ⁻²	3.2985 ⁻¹	9.1348 ⁻²	
3.70	2.8224	1.4815 ⁺¹	2.0961 ⁻¹	7.4703 ⁻¹	1.6651 ⁻²	4.0356 ⁻¹	1.3568 ⁻¹	
3.80	2.9224	1.5387 ⁺¹	1.9514 ⁻¹	1.1009	2.0479 ⁻²	5.2427 ⁻¹	2.1491 ⁻¹	
3.90	3.0224	1.5395 ⁺¹	3.9900 ⁻¹	1.3373	7.5618 ⁻²	6.0038 ⁻¹	3.0199 ⁻¹	
4.00	3.1224	1.4790 ⁺¹	8.0860 ⁻¹	1.2684	1.7691 ⁻¹	5.6831 ⁻¹	3.5386 ⁻¹	
4.50	3.6224	1.6434 ⁺¹	2.5324	2.9328 ⁻¹	8.7988 ⁻¹	2.2664 ⁻¹	5.1778 ⁻¹	
5.00	4.1224	1.5670 ⁺¹	7.3428 ⁻¹	4.0974 ⁻¹	4.5760 ⁻¹	1.9344 ⁻²	2.5842 ⁻¹	
5.50	4.6224	1.4988 ⁺¹	7.0092 ⁻¹	3.2077 ⁻¹	9.8084 ⁻²	1.8719 ⁻²	8.5955 ⁻²	
6.00	5.1224	1.4535 ⁺¹	3.9101 ⁻¹	9.4681 ⁻²	1.8000 ⁻²	1.3298 ⁻²	1.8260 ⁻²	
6.50	5.6224	1.4182 ⁺¹	2.2677 ⁻¹	4.1069 ⁻²	9.1636 ⁻³	4.9272 ⁻³	3.1959 ⁻³	
7.00	6.1224	1.3968 ⁺¹	1.4825 ⁻¹	2.1421 ⁻²	3.6943 ⁻³	1.0999 ⁻³	4.1942 ⁻⁴	
7.50	6.6224	1.3833 ⁺¹	1.0387 ⁻¹	1.2042 ⁻²	1.4865 ⁻³	2.7551 ⁻⁴	7.0368 ⁻⁵	
8.00	7.1224	1.3747 ⁺¹	7.6888 ⁻²	7.4221 ⁻³	6.8277 ⁻⁴	8.7402 ⁻⁵	1.6548 ⁻⁵	
9.00	8.1224	1.3661 ⁺¹	4.7270 ⁻²	3.4919 ⁻³	2.0152 ⁻⁴	1.5805 ⁻⁵	2.1711 ⁻⁶	
10.00	9.1224	1.3638 ⁺¹	3.2103 ⁻²	1.9869 ⁻³	8.0944 ⁻⁵	5.3902 ⁻⁶	6.8131 ⁻⁷	

$\sigma_{4 \rightarrow v'} (\text{A}^2)$

k_0^2 (eV)	k_4^2 (eV)		v'	4	5	6	7	8
1.30	0.1299	8.5644						
1.40	0.2299	1.0183 ⁺¹						
1.50	0.3299	1.1095 ⁺¹	6.9625 ⁻⁶					
1.60	0.4299	1.1730 ⁺¹	7.8955 ⁻⁵					
1.70	0.5299	1.2176 ⁺¹	2.7876 ⁻⁴					
1.80	0.6299	1.2514 ⁺¹	8.3652 ⁻⁴	3.9304 ⁻⁷				
1.90	0.7299	1.2776 ⁺¹	2.4664 ⁻³	1.3504 ⁻⁵				
2.00	0.8299	1.2996 ⁺¹	6.3505 ⁻³	1.0483 ⁻⁴				
2.05	0.8799	1.3089 ⁺¹	9.3234 ⁻³	2.2319 ⁻⁴	3.4117 ⁻¹⁰			
2.10	0.9299	1.3203 ⁺¹	1.5314 ⁻²	5.0504 ⁻⁴	1.0410 ⁻⁶			
2.15	0.9799	1.3355 ⁺¹	2.7539 ⁻²	1.2073 ⁻³	8.3021 ⁻⁶			
2.20	1.0299	1.3571 ⁺¹	5.2362 ⁻²	2.9574 ⁻³	3.8190 ⁻⁵			
2.25	1.0799	1.3855 ⁺¹	9.8513 ⁻²	6.9895 ⁻³	1.3846 ⁻⁴			
2.30	1.1299	1.4020 ⁺¹	1.4946 ⁻¹	1.3050 ⁻²	3.6039 ⁻⁴			
2.35	1.1799	1.3852 ⁺¹	1.5264 ⁻¹	1.6119 ⁻²	5.8943 ⁻⁴	1.0510 ⁻⁸		
2.40	1.2299	1.3663 ⁺¹	1.3665 ⁻¹	1.7204 ⁻²	8.0704 ⁻⁴	9.7959 ⁻⁷		
2.45	1.2799	1.3632 ⁺¹	1.5082 ⁻¹	2.2475 ⁻²	1.3183 ⁻³	5.5112 ⁻⁶		
2.50	1.3299	1.3739 ⁺¹	2.2271 ⁻¹	3.9360 ⁻²	2.8107 ⁻³	2.3627 ⁻⁵		
2.55	1.3799	1.3945 ⁺¹	3.9310 ⁻¹	8.2859 ⁻²	7.0576 ⁻³	9.6197 ⁻⁵		
2.60	1.4299	1.4098 ⁺¹	6.6837 ⁻¹	1.6893 ⁻¹	1.6962 ⁻²	3.3335 ⁻⁴		
2.65	1.4799	1.3922 ⁺¹	8.5359 ⁻¹	2.6030 ⁻¹	3.0618 ⁻²	8.0406 ⁻⁴		
2.70	1.5299	1.3552 ⁺¹	8.0430 ⁻¹	2.9842 ⁻¹	4.0981 ⁻²	1.3644 ⁻³		
2.75	1.5799	1.3291 ⁺¹	6.7949 ⁻¹	3.1047 ⁻¹	4.9695 ⁻²	2.0207 ⁻³		
2.80	1.6299	1.3167 ⁺¹	5.8188 ⁻¹	3.3296 ⁻¹	6.2091 ⁻²	3.0015 ⁻³		
2.85	1.6799	1.3137 ⁺¹	5.1598 ⁻¹	3.7852 ⁻¹	8.2268 ⁻²	4.6349 ⁻³		
2.90	1.7299	1.3186 ⁺¹	4.5405 ⁻¹	4.4102 ⁻¹	1.1188 ⁻¹	7.2407 ⁻³		
2.95	1.7799	1.3306 ⁺¹	3.5866 ⁻¹	4.8283 ⁻¹	1.4331 ⁻¹	1.0541 ⁻²		
3.00	1.8299	1.3450 ⁺¹	2.3022 ⁻¹	4.5920 ⁻¹	1.6000 ⁻¹	1.3272 ⁻²		
3.10	1.9299	1.3673 ⁺¹	5.5121 ⁻²	3.4836 ⁻¹	1.6985 ⁻¹	1.7629 ⁻²		
3.20	2.0299	1.3994 ⁺¹	1.1710 ⁻²	3.4335 ⁻¹	2.4235 ⁻¹	3.0935 ⁻²		
3.30	2.1299	1.4454 ⁺¹	9.4458 ⁻²	3.9559 ⁻¹	4.2611 ⁻¹	6.6150 ⁻²		
3.40	2.2299	1.4457 ⁺¹	3.6860 ⁻¹	3.3890 ⁻¹	6.0387 ⁻¹	1.1335 ⁻¹		
3.50	2.3299	1.3849 ⁺¹	6.3149 ⁻¹	1.7573 ⁻¹	5.9031 ⁻¹	1.3379 ⁻¹		
3.60	2.4299	1.3361 ⁺¹	7.9406 ⁻¹	6.6355 ⁻²	5.2603 ⁻¹	1.4415 ⁻¹		
3.70	2.5299	1.3138 ⁺¹	9.3832 ⁻¹	2.0126 ⁻²	5.0067 ⁻¹	1.6646 ⁻¹		
3.80	2.6299	1.3128 ⁺¹	1.0535	1.9032 ⁻²	4.9421 ⁻¹	2.0040 ⁻¹		
3.90	2.7299	1.3299 ⁺¹	1.0379	5.7127 ⁻²	4.5760 ⁻¹	2.2787 ⁻¹		
4.00	2.8299	1.3579 ⁺¹	8.9724 ⁻¹	1.2142 ⁻¹	3.9323 ⁻¹	2.4262 ⁻¹		
4.50	3.3299	1.6104 ⁺¹	4.1359 ⁻¹	1.1712	3.0136 ⁻¹	6.8869 ⁻¹		
5.00	3.8299	1.4592 ⁺¹	1.2250	1.3065	5.4505 ⁻²	7.3473 ⁻¹		
5.50	4.3299	1.5738 ⁺¹	1.5801	4.8491 ⁻¹	9.1350 ⁻²	4.2156 ⁻¹		
6.00	4.8299	1.5073 ⁺¹	6.7367 ⁻¹	1.3679 ⁻¹	9.8894 ⁻²	1.3606 ⁻¹		
6.50	5.3299	1.4514 ⁺¹	3.9226 ⁻¹	9.8519 ⁻²	5.1950 ⁻²	3.3488 ⁻²		
7.00	5.8299	1.4202 ⁺¹	2.5591 ⁻¹	5.2776 ⁻²	1.5661 ⁻²	5.8490 ⁻³		
7.50	6.3299	1.3996 ⁺¹	1.7119 ⁻¹	2.7116 ⁻²	5.0965 ⁻³	1.2409 ⁻³		
8.00	6.8299	1.3863 ⁺¹	1.2140 ⁻¹	1.5430 ⁻²	2.0229 ⁻³	3.4715 ⁻⁴		
9.00	7.8299	1.3724 ⁺¹	7.0384 ⁻²	6.5194 ⁻³	4.9691 ⁻⁴	5.0792 ⁻⁵		
10.00	8.8299	1.3675 ⁺¹	4.6131 ⁻²	3.4781 ⁻³	1.7844 ⁻⁴	1.3932 ⁻⁵		

$\sigma_{5 \rightarrow v'} (\text{A}^2)$

k_0^2 (eV)	k_5^2 (eV)	5	6	v'	7	8
1.60	0.1373	8.7085				
1.70	0.2373	1.0269 ⁺¹				
1.80	0.3373	1.1151 ⁺¹	1.5034 ⁻⁵			
1.90	0.4373	1.1770 ⁺¹	1.4617 ⁻⁴			
2.00	0.5373	1.2208 ⁺¹	4.8818 ⁻⁴			
2.05	0.5873	1.2388 ⁺¹	8.3327 ⁻⁴	4.6168 ⁻¹⁰		
2.10	0.6373	1.2544 ⁺¹	1.4307 ⁻³	1.1191 ⁻⁶		
2.15	0.6873	1.2684 ⁺¹	2.5257 ⁻³	7.7489 ⁻⁶		
2.20	0.7373	1.2819 ⁺¹	4.5835 ⁻³	3.2323 ⁻⁵		
2.25	0.7873	1.2953 ⁺¹	8.2474 ⁻³	1.0690 ⁻⁴		
2.30	0.8373	1.3063 ⁺¹	1.2806 ⁻²	2.6334 ⁻⁴		
2.35	0.8873	1.3129 ⁺¹	1.6055 ⁻²	4.6739 ⁻⁴	1.7843 ⁻⁸	
2.40	0.9373	1.3204 ⁺¹	2.1237 ⁻²	8.2185 ⁻⁴	1.7656 ⁻⁶	
2.45	0.9873	1.3323 ⁺¹	3.3984 ⁻²	1.7095 ⁻³	1.0640 ⁻⁵	
2.50	1.0373	1.3503 ⁺¹	6.1781 ⁻²	3.9637 ⁻³	4.2877 ⁻⁵	
2.55	1.0873	1.3753 ⁺¹	1.1677 ⁻¹	9.3521 ⁻³	1.4634 ⁻⁴	
2.60	1.1373	1.3982 ⁺¹	1.9820 ⁻¹	1.9429 ⁻²	4.0381 ⁻⁴	
2.65	1.1873	1.3949 ⁺¹	2.4773 ⁻¹	2.9241 ⁻²	7.6918 ⁻⁴	
2.70	1.2373	1.3713 ⁺¹	2.3249 ⁻¹	3.2604 ⁻²	1.0536 ⁻³	
2.75	1.2873	1.3531 ⁺¹	2.0759 ⁻¹	3.4215 ⁻²	1.3316 ⁻³	
2.80	1.3373	1.3451 ⁺¹	2.0981 ⁻¹	4.0333 ⁻²	1.8622 ⁻³	
2.85	1.3873	1.3436 ⁺¹	2.5512 ⁻¹	5.7041 ⁻²	3.0779 ⁻³	
2.90	1.4373	1.3443 ⁺¹	3.5595 ⁻¹	9.2743 ⁻²	5.7601 ⁻³	
2.95	1.4873	1.3413 ⁺¹	4.9160 ⁻¹	1.4984 ⁻¹	1.0579 ⁻²	
3.00	1.5373	1.3315 ⁺¹	5.7833 ⁻¹	2.0710 ⁻¹	1.6475 ⁻²	
3.10	1.6373	1.3144 ⁺¹	5.2825 ⁻¹	2.6472 ⁻¹	2.6364 ⁻²	
3.20	1.7373	1.3147 ⁺¹	4.4865 ⁻¹	3.2401 ⁻¹	3.9938 ⁻²	
3.30	1.8373	1.3288 ⁺¹	3.8319 ⁻¹	4.1902 ⁻¹	6.3446 ⁻²	
3.40	1.9373	1.3492 ⁺¹	2.5208 ⁻¹	4.5213 ⁻¹	8.3554 ⁻²	
3.50	2.0373	1.3626 ⁺¹	1.2005 ⁻¹	4.0202 ⁻¹	9.0289 ⁻²	
3.60	2.1373	1.3793 ⁺¹	5.2277 ⁻¹	4.0644 ⁻¹	1.1091 ⁻¹	
3.70	2.2373	1.4089 ⁺¹	2.1277 ⁻²	5.0014 ⁻¹	1.6640 ⁻¹	
3.80	2.3373	1.4433 ⁺¹	2.6108 ⁻²	6.4023 ⁻¹	2.6104 ⁻¹	
3.90	2.4373	1.4515 ⁺¹	9.0699 ⁻²	7.0117 ⁻¹	3.5256 ⁻¹	
4.00	2.5373	1.4216 ⁺¹	1.9814 ⁻¹	6.1909 ⁻¹	3.8696 ⁻¹	
4.50	3.0373	1.3138 ⁺¹	9.7622 ⁻¹	2.4072 ⁻¹	5.5616 ⁻¹	
5.00	3.5373	1.4624 ⁺¹	1.8808	7.6423 ⁻²	1.0239	
5.50	4.0373	1.6704 ⁺¹	1.3319	2.5147 ⁻¹	1.1447	
6.00	4.5373	1.5255 ⁺¹	6.2008 ⁻¹	4.5436 ⁻¹	6.1267 ⁻¹	
6.50	5.0373	1.4804 ⁺¹	6.4815 ⁻¹	3.5637 ⁻¹	2.2510 ⁻¹	
7.00	5.5373	1.4507 ⁺¹	4.5097 ⁻¹	1.4916 ⁻¹	5.4938 ⁻²	
7.50	6.0373	1.4217 ⁺¹	2.8393 ⁻¹	6.4090 ⁻²	1.5549 ⁻²	
8.00	6.5373	1.4018 ⁺¹	1.9021 ⁻¹	3.2365 ⁻²	5.5883 ⁻³	
9.00	7.5373	1.3805 ⁺¹	1.0231 ⁻¹	1.1857 ⁻²	1.2009 ⁻³	
10.00	8.5373	1.3721 ⁺¹	6.4255 ⁻²	5.8397 ⁻³	3.9456 ⁻⁴	

k_0^2 (eV)	k_6^2 (eV)		v'	
		6	7	8
1.90	0.1448	8.8504		
2.00	0.2448	1.0351 ⁺¹		
2.05	0.2948	1.0818 ⁺¹	2.4083 ⁻⁸	
2.10	0.3448	1.1205 ⁺¹	3.1363 ⁻⁵	
2.15	0.3948	1.1536 ⁺¹	1.1346 ⁻⁴	
2.20	0.4448	1.1809 ⁺¹	2.4499 ⁻⁴	
2.25	0.4948	1.2040 ⁺¹	4.5690 ⁻⁴	
2.30	0.5448	1.2242 ⁺¹	7.8032 ⁻⁴	
2.35	0.5948	1.2417 ⁺¹	1.2507 ⁻³	2.5747 ⁻⁸
2.40	0.6448	1.2569 ⁺¹	2.0353 ⁻³	2.0526 ⁻⁶
2.45	0.6948	1.2709 ⁺¹	3.5021 ⁻³	1.0379 ⁻⁵
2.50	0.7448	1.2846 ⁺¹	6.3013 ⁻³	3.6977 ⁻⁵
2.55	0.7948	1.2987 ⁺¹	1.1401 ⁻²	1.1457 ⁻⁴
2.60	0.8448	1.3113 ⁺¹	1.8622 ⁻²	2.8947 ⁻⁴
2.65	0.8948	1.3179 ⁺¹	2.3802 ⁻²	5.2031 ⁻⁴
2.70	0.9448	1.3206 ⁺¹	2.6088 ⁻²	7.3928 ⁻⁴
2.75	0.9948	1.3258 ⁺¹	3.1703 ⁻²	1.1060 ⁻³
2.80	1.0448	1.3354 ⁺¹	4.6381 ⁻²	1.9607 ⁻³
2.85	1.0948	1.3495 ⁺¹	7.6498 ⁻²	3.8925 ⁻³
2.90	1.1448	1.3664 ⁺¹	1.2803 ⁻¹	7.7539 ⁻³
2.95	1.1948	1.3782 ⁺¹	1.9090 ⁻¹	1.3566 ⁻²
3.00	1.2448	1.3748 ⁺¹	2.2816 ⁻¹	1.8752 ⁻²
3.10	1.3448	1.3482 ⁺¹	2.0963 ⁻¹	2.2183 ⁻²
3.20	1.4448	1.3370 ⁺¹	2.1632 ⁻¹	2.8313 ⁻²
3.30	1.5448	1.3357 ⁺¹	3.2584 ⁻¹	5.1888 ⁻²
3.40	1.6448	1.3297 ⁺¹	4.8990 ⁻¹	9.4756 ⁻²
3.50	1.7448	1.3182 ⁺¹	5.4213 ⁻¹	1.2713 ⁻¹
3.60	1.8448	1.3111 ⁺¹	5.3599 ⁻¹	1.5200 ⁻¹
3.70	1.9448	1.3095 ⁺¹	5.4470 ⁻¹	1.8682 ⁻¹
3.80	2.0448	1.3124 ⁺¹	5.5970 ⁻¹	2.3302 ⁻¹
3.90	2.1448	1.3195 ⁺¹	5.4025 ⁻¹	2.7481 ⁻¹
4.00	2.2448	1.3297 ⁺¹	4.9116 ⁻¹	3.0794 ⁻¹
4.50	2.7448	1.4432 ⁺¹	3.5542 ⁻¹	8.0129 ⁻¹
5.00	3.2448	1.4447 ⁺¹	7.7982 ⁻²	9.2419 ⁻¹
5.50	3.7448	1.4471 ⁺¹	4.1437 ⁻¹	1.7030
6.00	4.2448	1.4159 ⁺¹	1.3076	1.6631
6.50	4.7448	1.5114 ⁺¹	1.5685	9.7816 ⁻¹
7.00	5.2448	1.4987 ⁺¹	9.0317 ⁻¹	3.4704 ⁻¹
7.50	5.7448	1.4546 ⁺¹	4.9643 ⁻¹	1.3382 ⁻¹
8.00	6.2448	1.4236 ⁺¹	3.0457 ⁻¹	6.2591 ⁻²
9.00	7.2448	1.3912 ⁺¹	1.4819 ⁻¹	2.0698 ⁻²
10.00	8.2448	1.3779 ⁺¹	8.8242 ⁻²	9.5461 ⁻³

$\sigma_7 \rightarrow v' (\text{A}^2)$

k_0^2 (eV)	k_7^2 (eV)		v'
		7	8
2.15	0.1022	8.0193	
2.20	0.1522	8.9897	
2.25	0.2022	9.8220	
2.30	0.2522	1.0428 ⁺¹	
2.35	0.3022	1.0879 ⁺¹	1.1148 ⁻⁶
2.40	0.3522	1.1258 ⁺¹	5.6212 ⁻⁵
2.45	0.4022	1.1580 ⁺¹	1.6746 ⁻⁴
2.50	0.4522	1.1846 ⁺¹	3.2330 ⁻⁴
2.55	0.5022	1.2072 ⁺¹	5.4371 ⁻⁴
2.60	0.5522	1.2270 ⁺¹	8.4840 ⁻⁴
2.65	0.6022	1.2440 ⁺¹	1.2301 ⁻³
2.70	0.6522	1.2583 ⁺¹	1.7139 ⁻³
2.75	0.7022	1.2710 ⁺¹	2.5119 ⁻³
2.80	0.7522	1.2832 ⁺¹	3.9041 ⁻³
2.85	0.8022	1.2952 ⁺¹	6.2330 ⁻³
2.90	0.8522	1.3068 ⁺¹	9.6952 ⁻³
2.95	0.9022	1.3161 ⁺¹	1.3479 ⁻²
3.00	0.9522	1.3208 ⁺¹	1.5744 ⁻²
3.10	1.0522	1.3265 ⁺¹	1.8595 ⁻²
3.20	1.1522	1.3406 ⁺¹	3.2435 ⁻²
3.30	1.2522	1.3618 ⁺¹	6.6942 ⁻²
3.40	1.3522	1.3700 ⁺¹	1.0227 ⁻¹
3.50	1.4522	1.3582 ⁺¹	1.0548 ⁻¹
3.60	1.5522	1.3510 ⁺¹	1.0976 ⁻¹
3.70	1.6522	1.3552 ⁺¹	1.4805 ⁻¹
3.80	1.7522	1.3653 ⁺¹	2.3432 ⁻¹
3.90	1.8522	1.3684 ⁺¹	3.3589 ⁻¹
4.00	1.9522	1.3584 ⁺¹	3.9053 ⁻¹
4.50	2.4522	1.3180 ⁺¹	7.3386 ⁻¹
5.00	2.9522	1.2954 ⁺¹	1.2658
5.50	3.4522	1.3321 ⁺¹	1.7628
6.00	3.9522	1.4969 ⁺¹	2.7444
6.50	4.4522	1.6757 ⁺¹	2.7028
7.00	4.9522	1.5989 ⁺¹	1.4231
7.50	5.4522	1.5091 ⁺¹	7.4149 ⁻¹
8.00	5.9522	1.4561 ⁺¹	4.3874 ⁻¹
9.00	6.9522	1.4057 ⁺¹	2.0378 ⁻¹
10.00	7.9522	1.3856 ⁺¹	1.1797 ⁻¹

$\sigma_{B \rightarrow v'} (A^2)$		
k_B^2 (eV)	k_B^2 (eV)	v' 8
2.45	0.1097	8.1677
2.50	0.1597	9.1257
2.55	0.2097	9.9260
2.60	0.2597	1.0502 ⁺¹
2.65	0.3097	1.0938 ⁺¹
2.70	0.3597	1.1307 ⁺¹
2.75	0.4097	1.1618 ⁺¹
2.80	0.4597	1.1874 ⁺¹
2.85	0.5097	1.2090 ⁺¹
2.90	0.5597	1.2280 ⁺¹
2.95	0.6097	1.2442 ⁺¹
3.00	0.6597	1.2576 ⁺¹
3.10	0.7597	1.2789 ⁺¹
3.20	0.8597	1.2962 ⁺¹
3.30	0.9597	1.3103 ⁺¹
3.40	1.0597	1.3199 ⁺¹
3.50	1.1597	1.3265 ⁺¹
3.60	1.2597	1.3347 ⁺¹
3.70	1.3597	1.3452 ⁺¹
3.80	1.4597	1.3553 ⁺¹
3.90	1.5597	1.3600 ⁺¹
4.00	1.6597	1.3603 ⁺¹
4.50	2.1597	1.4147 ⁺¹
5.00	2.6597	1.4497 ⁺¹
5.50	3.1597	1.5228 ⁺¹
6.00	3.6597	1.5923 ⁺¹
6.50	4.1597	1.7358 ⁺¹
7.00	4.6597	1.6436 ⁺¹
7.50	5.1597	1.5440 ⁺¹
8.00	5.6597	1.4844 ⁺¹
9.00	6.6597	1.4264 ⁺¹
10.00	7.6597	1.4022 ⁺¹

Table 2
Angular Distribution Coefficients for Differential
(Rotationally-Averaged) Distributions
(Units Bohr radii squared (a_0^2) in conjunction with equation 1.)

A-L COEFFICIENTS FOR C TO O TRANSITION

L	0.10 EV	0.20 EV	0.30 EV	0.40 EV	0.50 EV
0	8.937732D 00	1.099618C 01	1.221203D 01	1.301137D 01	1.356619D 01
1	-4.625035D 00	-5.611043D 00	-5.612480D 00	-5.180902D 00	-4.526681D 00
2	-1.126111D 00	-1.960605D 00	-2.706016D 00	-3.404523D 00	-4.097676D 00
3	-4.425593D-01	-6.076969D-01	-7.989960D-01	-9.935901D-01	-1.151836D 00
4	-2.729855D-01	-3.558525C-01	-4.202369D-01	-4.781748D-01	-5.105301D-01
5	-2.387492D-01	-2.922919C-01	-3.311046D-01	-3.539858D-01	-3.809879D-01
6	3.386519D-02	2.595213C-02	2.116227D-02	1.663952D-02	1.245429D-02
7	9.543769D-02	9.546137C-02	9.852034D-02	1.030009D-01	1.084532D-01
8	3.321169D-02	3.274821C-02	3.805559D-02	4.549065D-02	5.364967D-02
9	8.654401D-02	8.361751C-02	8.180972D-02	8.165261D-02	8.221674D-02
10	2.962922D-02	2.532255D-02	2.554282D-02	2.755569D-02	3.020167D-02
11	7.113750D-02	6.632500C-02	6.308345D-02	6.072063D-02	5.871634D-02
12	4.764120D-02	4.361825C-02	4.167557D-02	4.069173D-02	4.011709D-02
13	-1.329761D-02	-1.670056D-02	-1.672228D-02	-1.558144D-02	-1.387920D-02
14	-1.061479D-04	-3.039981C-03	-4.438189D-03	-5.155629D-03	-5.387275D-03
15	2.801381D-03	1.162432C-03	3.095975D-04	-1.474312D-04	-2.994415D-04
16	3.444047D-03	2.361710D-03	1.760291D-03	1.394800D-03	1.194675D-03
17	2.979059D-03	2.253072D-03	1.825583D-03	1.547126D-03	1.364062D-03
18	2.392273D-03	1.890873D-03	1.584606D-03	1.374950D-03	1.229385D-03
19	1.728631D-03	1.404142D-03	1.200114D-03	1.056819D-03	9.523837D-04
20	1.224069D-03	1.001523D-03	8.582660D-04	7.545014D-04	6.760397D-04
21	8.299269D-04	6.792964D-04	5.803350D-04	5.068783D-04	4.498587D-04
22	4.525788D-04	3.643910D-04	3.051616D-04	2.605743D-04	2.253526D-04
23	2.248184D-04	1.771156D-04	1.444056D-04	1.194543D-04	9.946424D-05
24	6.392793D-05	5.052285D-05	4.131214D-05	3.427235D-05	2.862030D-05

L	0.60 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	1.397678D 01	1.427205D 01	1.449476D 01	1.467157D 01	1.482120D 01
1	-3.749882D 00	-2.937160D 00	-2.102966D 00	-1.293423D 00	-5.266149D-01
2	-4.752294D 00	-5.357522D 00	-5.928231D 00	-6.466461D 00	-6.978395D 00
3	-1.337230D 00	-1.538956D 00	-1.752288D 00	-1.974582D 00	-2.207829D 00
4	-5.373280D-01	-5.529892D-01	-5.513500D-01	-5.250468D-01	-4.663480D-01
5	-3.972327D-01	-4.019979C-01	-3.983505D-01	-3.840643D-01	-3.570158D-01
6	1.252213D-02	1.970266C-02	2.838432D-02	4.149027D-02	6.223704D-02
7	1.165597D-01	1.272961D-01	1.408644D-01	1.577229D-01	1.784774D-01
8	6.3C9197D-02	7.369149C-02	8.592938D-02	9.989574D-02	1.156214D-01
9	8.4C0206D-02	8.677171C-02	9.083170D-02	9.618082D-02	1.028757D-01
10	3.359430D-02	3.721484C-02	4.139473D-02	4.604995D-02	5.121232D-02
11	5.731624D-02	5.614497C-02	5.552265D-02	5.537969D-02	5.572509D-02
12	3.999261D-02	4.003646C-02	4.038985D-02	4.100430D-02	4.187574D-02
13	-1.189492D-02	-9.834346C-03	-7.683749D-03	-5.509971D-03	-3.345189D-03
14	-5.398088D-03	-5.199133C-03	-4.817016D-03	-4.287071D-03	-3.637738D-03
15	-3.398846D-04	-2.501729D-04	-5.453974D-05	2.291319D-04	5.861377D-04
16	1.088413D-03	1.064294C-03	1.103491D-03	1.195943D-03	1.333624D-03
17	1.249937D-03	1.191616D-03	1.169155D-03	1.178743D-03	1.218634D-03
18	1.123547D-03	1.060849C-03	1.018919D-03	9.980389D-04	9.967553D-04
19	8.756378D-04	8.198282D-04	7.805838D-04	7.549235D-04	7.406913D-04
20	6.157145D-04	5.691931C-04	5.333982D-04	5.064717D-04	4.870456D-04
21	4.046211D-04	3.683723D-04	3.390448D-04	3.154679D-04	2.967554D-04
22	1.968455D-04	1.734216D-04	1.539847D-04	1.378208D-04	1.244102D-04
23	5.299794D-05	6.920298C-05	5.752312D-05	4.757246D-05	3.906595D-05
24	2.395408D-05	2.003505C-05	1.670768D-05	1.386389D-05	1.142495D-05

A-L COEFFICIENTS FOR 0 TO 0 TRANSITION

L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	1.496016D 01	1.510539D 01	1.527876D 01	1.551019D 01	1.585435D 01
1	1.847494D-01	8.308083D-01	1.403181D 00	1.889607D 00	2.276371D 00
2	-7.473667D 00	-7.952820D 00	-8.42838D 00	-8.884784D 00	-9.306326D 00
3	-2.454779D 00	-2.720071D 00	-3.009779D 00	-3.334053D 00	-3.707618D 00
4	-3.629461D-01	-1.989683D-01	5.515792D-02	4.397687D-01	1.036740D 00
5	-3.137329D-01	-2.506934D-01	-1.607597D-01	-3.600687D-02	1.389912D-01
6	9.179502D-02	1.318450D-01	1.865082D-01	2.602030D-01	3.614132D-01
7	2.043849D-01	2.366492D-01	2.776403D-01	3.299862D-01	3.987176D-01
8	1.338799D-01	1.553958D-01	1.813920D-01	2.134177D-01	2.541892D-01
9	1.112877D-01	1.217607D-01	1.349038D-01	1.516183D-01	1.733333D-01
10	5.708157D-02	6.383785D-02	7.180510D-02	8.149581D-02	9.364590D-02
11	5.665562D-02	5.826641D-02	6.070214D-02	6.426598D-02	6.933846D-02
12	4.304249D-02	4.454620D-02	4.645485D-02	4.892201D-02	5.213044D-02
13	-1.202271D-03	9.276335D-04	3.041305D-03	5.152015D-03	7.275585D-03
14	-2.889601D-03	-2.049566E-03	-1.134162D-03	-1.505167D-04	8.910246D-04
15	1.004940D-03	1.478690D-03	2.000171D-03	2.563917D-03	3.165750D-03
16	1.508977D-03	1.717750D-03	1.955528D-03	2.218938D-03	2.505431D-03
17	1.282823D-03	1.367776D-03	1.471053D-03	1.590539D-03	1.724556D-03
18	1.011227D-03	1.039293D-03	1.079258D-03	1.129765D-03	1.189784D-03
19	7.360790D-04	7.399052D-04	7.511304D-04	7.688598D-04	7.924827D-04
20	4.738715D-04	4.662094D-04	4.633699D-04	4.647742D-04	4.700166D-04
21	2.820937D-04	2.709920D-04	2.630383D-04	2.578235D-04	2.551026D-04
22	1.133172D-04	1.042358D-04	9.695292D-05	9.123507D-05	8.692814D-05
23	3.178944D-05	2.558010C-05	2.030785D-05	1.586664D-05	1.216993D-05
24	9.331547D-06	7.537461D-06	6.005959D-06	4.707322D-06	3.616997D-06

L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	1.641888D 01	1.745658D 01	1.965509D 01	2.494339D 01	2.568588D 01
1	2.540370D 00	2.643763D 00	2.540334D 00	2.519642D 00	5.360925D 00
2	-9.613310D 00	-9.522439C 00	-7.858092D 00	1.476340D 00	2.231083D 01
3	-4.154861D 00	-4.716162D 00	-5.439601D 00	-6.059482D 00	-3.926876D 00
4	2.003523D 00	3.690811D 00	7.004639D 00	1.398234D 01	1.202303D 01
5	3.993106D-01	7.595020C-01	1.320933D 00	1.917905D 00	-1.629266D-01
6	5.038766D-01	7.1198C7D-01	1.024473D 00	1.352639D 00	2.021923D-01
7	4.920407D-01	6.244514C-01	8.188827D-01	1.022161D 00	3.460067D-01
8	3.081873D-01	3.833067C-01	4.920571D-01	6.058695D-01	2.440538D-01
9	2.024392D-01	2.432114C-01	3.024747D-01	3.655339D-01	1.758952D-01
10	1.095257D-01	1.313679C-01	1.627600D-01	1.961845D-01	9.869048D-02
11	7.659299D-02	8.724276D-02	1.032507D-01	1.208844D-01	6.972750D-02
12	5.041466D-02	6.237704C-02	7.100094D-02	8.061089D-02	5.716034D-02
13	9.441047D-03	1.170599D-02	1.421342D-02	1.754959D-02	2.240937D-02
14	1.980762D-03	3.111410C-03	4.308300D-03	6.034618D-03	1.077099D-02
15	3.801736D-03	4.469132C-03	5.165277D-03	5.887850D-03	6.635044D-03
16	2.812502D-03	3.138544D-03	3.481820D-03	3.840925D-03	4.214770D-03
17	1.871552D-03	2.030463C-03	2.200155D-03	2.379788D-03	2.568645D-03
18	1.258224D-03	1.334464D-03	1.417708D-03	1.507441D-03	1.603170D-03
19	8.213341D-04	8.550179D-04	8.930460D-04	9.350941D-04	9.808660D-04
20	4.786673D-04	4.904814C-04	5.051216D-04	5.223904D-04	5.420797D-04
21	2.545883D-04	2.561281D-04	2.594955D-04	2.645699D-04	2.712122D-04
22	8.389396D-05	8.201667D-05	8.118884D-05	8.133106D-05	8.236855D-05
23	9.144480D-06	6.728362D-06	4.868642D-06	3.519609D-06	2.641439D-06
24	2.714464D-06	1.982381D-06	1.405927D-06	9.722943D-07	6.703381D-07

A-L COEFFICIENTS FOR 0 TO 0 TRANSITION

L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	1.976863D 01	1.749251D 01	1.847924D 01	2.227239D 01	2.911507D 01
1	6.053744D 00	5.525066D 00	4.796138D 00	4.298922D 00	4.779510D 00
2	1.507154D 01	7.051872D 00	4.387120D 00	8.249673D 00	2.155655D 01
3	-3.541398D 00	-4.324878D 00	-5.301687D 00	-6.040904D 00	-5.757605D 00
4	4.126995D 00	2.112783D 00	4.342761D 00	9.773476D 00	1.788467D 01
5	-8.925396D-01	-4.247986D-01	3.606025D-01	1.91719D 00	1.192078D 00
6	-1.933337D-01	6.959169D-02	5.042945D-01	9.056997D-01	9.559310D-01
7	1.164165D-01	2.785224D-01	5.423988D-01	7.856846D-01	8.177728D-01
8	1.215982D-01	2.114262D-01	3.566182D-01	4.906832D-01	5.092174D-01
9	1.112722D-01	1.603893D-01	2.398141D-01	3.137305D-01	3.249383D-01
10	6.541987D-02	9.117362D-02	1.327464D-01	1.715033D-01	1.774827D-01
11	5.190046D-02	6.554161D-02	8.791271D-02	1.090056D-01	1.123187D-01
12	4.893545D-02	5.601369D-02	6.747152D-02	7.840466D-02	8.052714D-02
13	2.366497D-02	2.497586D-02	2.688211D-02	2.921173D-02	3.087544D-02
14	1.221375D-02	1.278361D-02	1.347670D-02	1.447871D-02	1.559855D-02
15	7.016246D-03	7.403599D-03	7.796499D-03	8.194559D-03	8.597619D-03
16	4.406271D-03	4.601383D-03	4.799738D-03	5.001153D-03	5.205511D-03
17	2.666157D-03	2.765822D-03	2.867491D-03	2.971083D-03	3.076524D-03
18	1.653100D-03	1.704384D-03	1.756964D-03	1.810798D-03	1.865844D-03
19	1.050599D-03	1.030068D-03	1.055879D-03	1.082472D-03	1.109814D-03
20	5.527774D-04	5.640078D-04	5.757626D-04	5.880184D-04	6.007707D-04
21	2.750881D-04	2.793070D-04	2.838617D-04	2.887495D-04	2.939557D-04
22	8.319985D-05	8.422922D-05	8.544865D-05	8.686015D-05	8.845035D-05
23	2.3680120D-06	2.199681D-06	2.132741D-06	2.163749D-06	2.289386D-06
24	5.656531D-07	4.903237D-07	4.433086D-07	4.236265D-07	4.303507D-07

L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	3.462290D 01	3.067828D 01	2.361192D 01	1.938733D 01	1.816996D 01
1	7.267270D 00	9.712260D 00	9.934400D 00	9.142261D 00	8.270344D 00
2	3.970919D 01	4.075943D 01	2.882947D 01	1.901345D 01	1.475251D 01
3	-3.353280D 00	-9.705682D-01	-9.262888D-01	-1.959482D 00	-3.079736D 00
4	2.211461D 01	1.469012D 01	5.868035D 00	1.705801D 00	1.401125D 00
5	-3.767160D-01	-2.401636D 00	-2.823907D 00	-2.288615D 00	-1.512623D 00
6	8.799831D-02	-1.020797D 00	-1.243330D 00	-9.426728D-01	-5.136264D-01
7	2.999157D-01	-3.596073D-01	-4.869794D-01	-3.011388D-01	-3.912563D-02
8	2.265663D-01	-1.336124D-01	-2.020123D-01	-9.864299D-02	4.656843D-02
9	1.707922D-01	-2.644249D-02	-6.390022D-02	-6.326627D-03	7.481630D-02
10	9.690343D-02	-6.565296D-03	-2.620494D-02	4.051867D-03	4.673428D-02
11	6.789541D-02	1.042775D-02	-7.927943D-04	1.584154D-02	3.961159D-02
12	5.863791D-02	2.997349D-02	2.454939D-02	3.327539D-02	4.571113D-02
13	2.917993D-02	2.558943D-02	2.511752D-02	2.720433D-02	3.032486D-02
14	1.605184D-02	1.573421D-02	1.600290D-02	1.704390D-02	1.852071D-02
15	9.005499D-03	9.417735D-03	9.834173D-03	1.025567D-02	1.068167D-02
16	5.412738D-03	5.622575D-03	5.834928D-03	6.050131D-03	6.267923D-03
17	3.183751D-03	3.292673D-03	3.403066D-03	3.515287D-03	3.629112D-03
18	1.922048D-03	1.979359D-03	2.037682D-03	2.097146D-03	2.157649D-03
19	1.137873D-03	1.166624D-03	1.196060D-03	1.226146D-03	1.256870D-03
20	6.139898D-04	6.276623D-04	6.417774D-04	6.563154D-04	6.712760D-04
21	2.994636D-04	3.052641D-04	3.113491D-04	3.177113D-04	3.243451D-04
22	9.021224D-05	9.214113D-05	9.423193D-05	9.648163D-05	9.888433D-05
23	2.506561D-06	2.812334D-06	3.203942D-06	3.678784D-06	4.234329D-06
24	4.626051D-07	5.195636D-07	6.004401D-07	7.044925D-07	8.310139D-07

A-L COEFFICIENTS FOR 0 TO 0 TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	1.996303D 01	2.455661D 01	2.779185D 01	2.628774D 01	2.311097D 01
1	7.882558D 00	8.823181D 00	1.095530D 01	1.221253D 01	1.220489D 01
2	1.740961D 01	2.765140D 01	3.645066D 01	3.432104D 01	2.744602D 01
3	-3.670256D 00	-2.785339D 00	-5.544835D-01	7.226315D-01	5.908182D-01
4	4.373471D 00	9.405142D 00	1.126932D 01	1.853121D-83	3.996499D 00
5	-9.160655D-01	-1.178453D 00	-2.527459D 00	2.996273D-93	-3.741438D 00
6	-1.868659D-01	-3.347069D-01	-1.074542D 00	1.323058D-01	-1.724862D 00
7	1.601460D-01	7.274154D-C2	-3.705574D-01	1.792960D 01	-7.528461D-01
8	1.569279D-01	1.089101D-01	-1.357813D-01	1.293616D 01	-3.455937D-01
9	1.368642D-01	1.103897C-01	-2.669845D-C2	1.338203D 01	-1.444023D-01
10	7.937280D-02	6.527629C-02	-7.294124D-C3	1.267937D-01	-6.977516D-02
11	5.787829D-02	4.971089C-02	8.152671D-03	-2.055579D 00	-2.809130D-02
12	5.539184D-02	5.146673C-02	3.022009D-02	-3.674357D 00	1.181353D-02
13	3.313764D-02	3.284590C-02	2.797919D-02	-1.617184D 00	2.358097D-02
14	1.997513D-02	2.029481D-02	1.878054D-02	-6.258641D-01	1.770335D-02
15	1.111187D-02	1.154619C-02	1.198417D-02	-2.677562D-01	1.287146D-02
16	6.488269D-03	6.710862C-03	6.935646D-03	-9.500477D-02	7.391710D-03
17	3.744294D-03	3.861092C-C3	3.979335D-03	-4.651899D-02	4.219973D-03
18	2.219070D-03	2.281515C-03	2.344891D-03	-1.676196D-02	2.474355D-03
19	1.288205D-03	1.320141D-03	1.352648D-03	2.114426D-02	1.419345D-03
20	6.866362D-04	7.023847C-04	7.185002D-04	2.995734D-02	7.518443D-04
21	3.312381D-04	3.383829D-04	3.457669D-04	2.706934D-02	3.612540D-04
22	1.014362D-04	1.041324C-04	1.069669D-04	2.094927D-02	1.130418D-04
23	4.668182D-06	5.578018C-06	6.361635D-06	1.156880D-02	8.142024D-06
24	9.793424D-07	1.148831C-06	1.338866D-06	6.452373D-03	1.778307D-06

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	2.052876D 01	1.902243C 01	1.880573D 01	1.988433D 01	2.119334D 01
1	1.169837D 01	1.116131D 01	1.092465D 01	1.131618D 01	1.218202D 01
2	2.156161D 01	1.822491C 01	1.809596D 01	2.096589D 01	2.384518D 01
3	-1.020291D-01	-8.310762D-01	-1.217128D 00	-8.764574D-01	2.472514D-02
4	1.379063D 00	2.357589D-01	4.823067D-01	1.712402D 00	2.594494D 00
5	-3.449765D 00	-3.023434C 00	-2.697837D 00	-2.751195D 00	-3.215412D 00
6	-1.558924D 00	-1.321677C 00	-1.142016D 00	-1.170956D 00	-1.422828D 00
7	-6.479722D-01	-5.006113C-01	-3.887062D-01	-4.035046D-01	-5.530298D-01
8	-2.665889D-01	-2.040673C-01	-1.413668D-01	-1.493604D-01	-2.324537D-01
9	-1.107868D-01	-6.368783D-02	-2.772485D-02	-3.204059D-02	-7.932366D-02
10	-5.209020D-02	-2.725094C-02	-8.320192D-03	-1.081172D-02	-3.615618D-02
11	-1.815310D-02	-4.007384C-03	6.790785D-03	5.163676D-03	-9.801154D-03
12	1.720866D-02	2.483430C-02	3.072893D-02	3.008725D-02	2.238465D-02
13	2.535368D-02	2.791016C-02	3.005334D-02	3.015896D-02	2.786547D-02
14	1.880302D-02	2.026856D-C2	2.158258D-02	2.200853D-02	2.135311D-02
15	1.332076D-02	1.377380C-02	1.423043D-02	1.469188D-02	1.515518D-02
16	7.622980D-03	7.856383C-03	8.091817D-03	8.329923D-03	8.569078D-03
17	4.342278D-03	4.465884C-03	4.590743D-03	4.717306D-03	4.844545D-03
18	2.540379D-03	2.607251D-03	2.674939D-03	2.743639D-03	2.812876D-03
19	1.453490D-03	1.488165D-03	1.523346D-03	1.559195D-03	1.595336D-03
20	7.690337D-04	7.865688C-04	8.044314D-04	8.226882D-04	8.411835D-04
21	3.693308D-04	3.776348C-04	3.861507D-04	3.949020D-04	4.038277D-04
22	1.162710D-04	1.196296D-04	1.231097D-04	1.267192D-04	1.304323D-04
23	9.134910D-06	1.019383C-05	1.131705D-05	1.250287D-05	1.374972D-05
24	2.026634D-06	2.293358C-06	2.578001D-06	2.880083D-06	3.199164D-06

A-L COEFFICIENTS FOR 0 TO 0 TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	2.092936D 01	1.930116C 01	1.829894D 01	1.823783D 01	1.825042D 01
1	1.304018D 01	1.277367C 01	1.247460D 01	1.264472D 01	1.291708D 01
2	2.184477D 01	1.730985C 01	1.508507D 01	1.512248D 01	1.466516D 01
3	8.522567D-01	3.884622C-01	-1.058678D-01	-3.078753D-02	1.901356D-01
4	1.267072D 00	-5.451756D-01	-1.355009D 00	-1.397329D 00	-1.608472D 00
5	-3.879420D 00	-3.773447C 00	-3.511980D 00	-3.503341D 00	-3.648763D 00
6	-1.774665D 00	-1.705528C 00	-1.554581D 00	-1.542818D 00	-1.613170D 00
7	-7.582247D-01	-7.079199C-01	-6.088617D-01	-5.949572D-01	-6.305335D-01
8	-3.459590D-01	-3.170117C-01	-2.606873D-01	-2.521149D-01	-2.714334D-01
9	-1.438929D-01	-1.265933C-01	-9.327005D-02	-8.756326D-02	-9.801807D-02
10	-7.088492D-02	-6.200143C-02	-4.455414D-02	-4.186295D-02	-4.780968D-02
11	-3.047335D-02	-2.550418C-02	-1.535068D-02	-1.388182D-02	-1.751219D-02
12	1.181968D-02	1.485665C-02	2.068964D-02	2.188322D-02	2.033152D-02
13	2.461969D-02	2.606405D-02	2.864989D-02	2.951405D-02	2.925957D-02
14	2.061756D-02	2.204115C-02	2.403589D-C2	2.523967D-02	2.591828D-02
15	1.609186D-02	1.703804D-02	1.799767D-02	1.897037D-02	1.995389D-02
16	9.053030D-03	9.542674C-03	1.003953D-02	1.054331D-02	1.105288D-02
17	5.102496D-03	5.364045C-03	5.629947D-03	5.900309D-03	6.174202D-03
18	2.953607D-03	3.097205D-03	3.243533D-03	3.392475D-03	3.543911D-03
19	1.669008D-03	1.744465D-03	1.821613D-03	1.900378D-03	1.980693D-03
20	8.790733D-04	9.181303D-04	9.582898D-C4	9.950040D-04	1.041728D-03
21	4.222642D-04	4.414574C-04	4.613655D-C4	4.8119535D-04	5.032014D-04
22	1.381945D-04	1.463882D-04	1.549909D-04	1.639827D-04	1.733493D-04
23	1.642050D-05	1.931800D-05	2.243161D-05	2.575154D-05	2.925877D-05
24	3.886669D-06	4.637361C-06	5.448276D-06	6.316675D-06	7.240063D-06

L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	1.792960D 01	1.753668C 01	1.721136D 01	1.699187D 01	1.683732D 01
1	1.293616D 01	1.283745C 01	1.273727D 01	1.268661D 01	1.266386D 01
2	1.338203D 01	1.218958D 01	1.136977D 01	1.088533D 01	1.052464D 01
3	1.267937D-01	-6.557756C-02	-2.483380D-01	-3.586841D-01	-4.236251D-01
4	-2.055579D 00	-2.457435C 00	-2.742549D 00	-2.928776D 00	-3.076851D 00
5	-3.674357D 00	-3.612604C 00	-3.532108D 00	-3.474085D 00	-3.440048D 00
6	-1.617184D 00	-1.574037D 00	-1.521028D 00	-1.480550D 00	-1.452842D 00
7	-6.258641D-01	-5.924491D-01	-5.530528D-01	-5.215687D-01	-4.979360D-01
8	-2.677562D-01	-2.479582D-01	-2.246274D-01	-2.057607D-01	-1.914051D-01
9	-9.500477D-02	-8.245477D-02	-6.773815D-02	-5.556814D-02	-4.600666D-02
10	-4.651899D-02	-4.009300D-02	-3.247463D-02	-2.619842D-02	-2.131484D-02
11	-1.676196D-02	-1.285612C-02	-8.169169D-03	-4.233537D-03	-1.086749D-03
12	2.1114426D-02	2.367529C-02	2.664043D-02	2.920730D-02	3.135152D-02
13	2.995734D-02	3.140153D-02	3.306715D-02	3.458241D-02	3.592576D-02
14	2.706934D-02	2.860059D-02	3.025549D-02	3.184880D-02	3.336678D-02
15	2.094927D-02	2.195638C-02	2.297448D-02	2.400179D-02	2.504005D-02
16	1.156880D-02	1.209064D-02	1.261858D-C2	1.315131D-02	1.368956D-02
17	6.452373D-03	6.733818C-03	7.018946D-03	7.307385D-03	7.598894D-03
18	3.697753D-03	3.853884D-03	4.012213D-03	4.172670D-03	4.335170D-03
19	2.062496D-03	2.145715D-03	2.230297D-03	2.316194D-03	2.403348D-03
20	1.084920D-03	1.129043C-03	1.174050D-03	1.219913D-03	1.266602D-03
21	5.250753D-04	5.475498D-04	5.705996D-04	5.942031D-04	6.183419D-04
22	1.830757D-04	1.931427D-04	2.035397D-04	2.142541D-04	2.252723D-04
23	3.297502D-05	3.686224C-05	4.092323D-05	4.515125D-05	4.953987D-05
24	8.216155D-06	9.242658D-06	1.031760D-05	1.143910D-05	1.260538D-05

A-L COEFFICIENTS FOR 0 TO 0 TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	1.620293D 01	1.584584C 01	1.563259D 01	1.550055D 01	1.541752D 01
1	1.240349D 01	1.212990C 01	1.185548D 01	1.158257D 01	1.131926D 01
2	9.328398D 00	9.266020D 00	9.704260D 00	1.039902D 01	1.123151D 01
3	-7.558364D-01	-8.835336D-01	-8.450902D-01	-6.755425D-01	-3.988339D-01
4	-3.621010D 00	-3.842629C 00	-3.902465D 00	-3.854762D 00	-3.724317D 00
5	-3.247682D 00	-3.068070C 00	-2.900240D 00	-2.729788D 00	-2.549322D 00
6	-1.299937D 00	-1.149977C 00	-1.001673D 00	-8.468981D-01	-6.814907D-01
7	-3.702842D-01	-2.454600D-01	-1.227522D-01	2.614136D-03	1.332241D-01
8	-1.131131D-01	-3.571876D-02	4.118397D-02	1.205158D-01	2.038647D-01
9	6.777873D-03	5.993067D-02	1.132364D-01	1.680453D-01	2.252253D-01
10	6.320288D-03	3.504610C-02	6.479952D-02	9.633148D-02	1.301338D-01
11	1.720436D-02	3.690383D-02	5.768556D-02	7.985872D-02	1.035647D-01
12	4.357645D-02	5.673737C-02	7.065527D-02	8.550623D-02	1.013948D-01
13	4.349662D-02	5.170572C-02	6.039310D-02	6.963331D-02	7.948539D-02
14	4.149691D-02	5.004735D-02	5.885115D-02	6.789308D-02	7.717211D-02
15	3.037745D-02	3.593752D-02	4.170121D-02	4.765725D-02	5.379671D-02
16	1.645535D-02	1.932958C-02	2.229694D-02	2.534613D-02	2.846812D-02
17	9.101837D-03	1.067038C-02	1.229469D-02	1.396742D-02	1.568226D-02
18	5.176544D-03	6.060163C-03	6.979818D-03	7.930665D-03	8.908552D-03
19	2.856505D-03	3.335636D-03	3.836956D-03	4.357564D-03	4.894926D-03
20	1.511363D-03	1.772778C-03	2.048418D-03	2.336603D-03	2.635679D-03
21	7.463710D-04	8.851914D-04	1.033226D-03	1.189243D-03	1.352265D-03
22	2.845546D-04	3.499987D-04	4.207012D-04	4.959592D-04	5.752145D-04
23	7.369382D-05	1.010985D-04	1.312762D-04	1.638561D-04	1.985435D-04
24	1.905292D-05	2.640662C-05	3.453333D-05	4.332967D-05	5.271360D-05

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	1.536707D 01	1.533939C 01	1.532813D 01	1.533765D 01	1.536965D 01
1	1.107369D 01	1.085293C 01	1.066248D 01	1.038516D 01	1.025097D 01
2	1.214173D 01	1.309499D 01	1.406903D 01	1.602062D 01	1.790864D 01
3	-2.883467D-02	4.250148D-01	9.552209D-01	2.217348D 00	3.700329D 00
4	-3.523483D 00	-3.259897C 00	-2.939298D 00	-2.145529D 00	-1.175646D 00
5	-2.355085D 00	-2.145611D 00	-1.920763D 00	-1.427341D 00	-8.812465D-01
6	-5.033486D-01	-3.117082C-01	-1.064806D-01	3.435784D-01	8.440722D-01
7	2.702729D-01	4.141983D-01	5.649598D-01	8.860442D-01	1.230933D 00
8	2.920291D-01	3.853261D-01	4.838333D-01	6.959481D-01	9.269097D-01
9	2.852325D-01	3.482076D-01	4.141740D-01	5.548030D-01	7.063914D-01
10	1.664427D-01	2.053404C-01	2.468190D-01	3.373326D-01	4.373980D-01
11	1.288453D-01	1.556897C-01	1.840387D-01	2.450019D-01	3.111806D-01
12	1.183579D-01	1.364073D-01	1.555187D-01	1.968391D-01	2.421057D-01
13	8.999293D-02	1.011762D-01	1.130395D-01	1.388117D-01	1.672722D-01
14	8.669089D-02	9.645294D-02	1.064572D-01	1.272090D-01	1.489766D-01
15	6.011457D-02	6.660883D-02	7.327691D-02	8.714226D-02	1.017313D-01
16	3.165611D-02	3.490535D-02	3.821060D-02	4.498237D-02	5.196068D-02
17	1.743429D-02	1.921987D-02	2.103523D-02	2.474811D-02	2.856149D-02
18	9.910153D-03	1.093297D-02	1.197434D-02	1.410758D-02	1.630116D-02
19	5.446885D-03	6.011939D-03	6.588471D-03	7.772478D-03	8.993164D-03
20	2.944317D-03	3.261529C-03	3.586362D-03	4.256192D-03	4.949613D-03
21	1.521503D-03	1.696301C-03	1.876062D-03	2.248721D-03	2.636687D-03
22	6.580144D-04	7.439850D-04	8.328147D-04	1.018036D-03	1.211984D-03
23	2.350993D-04	2.733262D-04	3.130597D-04	3.965098D-04	4.845558D-04
24	6.261842D-05	7.298913D-05	8.377993D-05	1.064723D-04	1.304467D-04

A-L COEFFICIENTS FOR 0 TO 1 TRANSITION

L	0.50 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	6.4256C9D-05	1.631096D-04	3.729247D-04	7.667783D-04	1.572742D-03
1	0.0	0.0	0.0	0.0	0.0
2	6.055926D-05	1.290254D-04	3.018086D-04	5.992286D-04	1.173223D-03
3	0.0	0.0	0.0	0.0	0.0
4	6.707090D-05	1.983870D-04	4.618046D-04	9.237729D-04	1.822541D-03
5	0.0	0.0	0.0	0.0	0.0
6	2.637710D-05	1.907770D-05	6.092237D-05	8.514910D-05	7.239362D-05
7	0.0	0.0	0.0	0.0	0.0
8	4.433256D-06	1.455737D-05	4.467515D-05	5.656846D-05	4.749633D-05
9	0.0	0.0	0.0	0.0	0.0
10	1.533662D-06	8.062008D-07	3.981820D-06	3.219024D-06	9.520495D-07
11	0.0	0.0	0.0	0.0	0.0
12	3.002055D-08	3.241050D-07	1.225902D-06	1.021035D-06	3.597913D-07
L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	3.163081D-03	6.308756D-03	1.263831D-02	2.582035D-02	5.481071D-02
1	0.0	0.0	0.0	0.0	0.0
2	2.302353D-03	4.574840D-03	9.136720D-03	1.860413D-02	3.940624D-02
3	0.0	0.0	0.0	0.0	0.0
4	3.647655D-03	7.261285D-03	1.446653D-02	2.945803D-02	6.249673D-02
5	0.0	0.0	0.0	0.0	0.0
6	5.058247D-05	9.471643D-05	1.339758D-04	1.826971D-04	3.418739D-04
7	0.0	0.0	0.0	0.0	0.0
8	7.547438D-05	1.239658D-04	1.186679D-04	1.187022D-04	2.265852D-04
9	0.0	0.0	0.0	0.0	0.0
10	7.848713D-07	8.594350D-07	9.048956D-07	9.069044D-07	8.248122D-07
11	0.0	0.0	0.0	0.0	0.0
12	4.696778D-07	6.488462D-07	2.924549D-07	1.408426D-07	2.525435D-07
L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	1.240409D-01	3.117844D-01	9.342226D-01	3.625049D 00	9.220708D 00
1	0.0	0.0	0.0	0.0	0.0
2	8.903126D-02	2.234076D-01	6.684467D-01	2.591111D 00	6.585956D 00
3	0.0	0.0	0.0	0.0	0.0
4	1.412937D-01	3.546559D-01	1.061769D 00	4.117618D 00	1.046828D 01
5	0.0	0.0	0.0	0.0	0.0
6	6.101010D-04	9.227134D-04	1.457053D-03	2.474573D-03	-2.141955D-04
7	0.0	0.0	0.0	0.0	0.0
8	3.219733D-04	3.075199D-04	4.166179D-04	8.427242D-04	-5.231982D-04
9	0.0	0.0	0.0	0.0	0.0
10	8.722676D-07	6.565144D-07	6.668787D-07	7.629555D-07	5.857282D-07
11	0.0	0.0	0.0	0.0	0.0
12	2.478657D-07	8.760976D-08	6.208162D-08	1.351652D-07	8.298241D-08
L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	7.027973D 00	4.403031D 00	2.699095D 00	1.594870D 00	1.052469D 00
1	0.0	0.0	0.0	0.0	0.0
2	5.018190D 00	3.142934D 00	1.926024D 00	1.137639D 00	7.505610D-01
3	0.0	0.0	0.0	0.0	0.0
4	7.9577249D 00	4.996731D 00	3.062325D 00	1.808998D 00	1.193748D 00
5	0.0	0.0	0.0	0.0	0.0
6	-2.262518D-03	-2.724269D-03	-2.580356D-03	-2.441136D-03	-1.886090D-03
7	0.0	0.0	0.0	0.0	0.0
8	-8.167331D-04	-7.553245D-04	-7.626773D-04	-9.723372D-04	-7.608422D-04
9	0.0	0.0	0.0	0.0	0.0
10	4.316516D-07	3.840326D-07	4.474459D-07	8.379893D-07	8.781766D-07
11	0.0	0.0	0.0	0.0	0.0
12	4.705062D-08	4.117080D-08	6.028136D-08	1.665811D-07	1.773893D-07

A-L COEFFICIENTS FOR 0 TO 1 TRANSITION

L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	1.694528D 00	3.232560E 00	4.268068D 00	4.862141D 00	5.345746D 00
1	0.0	0.0	0.0	0.0	0.0
2	1.209159D 00	2.307216D 00	3.046411D 00	3.47C527D 00	3.815892D 00
3	0.0	0.0	0.0	0.0	0.0
4	1.922271D 00	3.666413D 00	4.839997D 00	5.512805D 00	6.060292D 00
5	0.0	0.0	0.0	0.0	0.0
6	-1.9C9898D-03	-2.750833D-03	-3.461189D-03	-3.817395D-03	-3.940632D-03
7	0.0	0.0	0.0	0.0	0.0
8	-8.429045D-04	-1.329065D-03	-1.761609D-03	-2.026425D-03	-2.177608D-03
9	0.0	0.0	0.0	0.0	0.0
10	9.089986D-07	9.121490D-07	9.046114D-07	9.060029D-07	9.185902D-07
11	0.0	0.0	0.0	0.0	0.0
12	1.887562D-07	2.006940D-07	2.132102D-07	2.263086D-07	2.399900D-07
L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	5.588932D 00	4.823944D 00	2.783693D 00	1.242429D 00	9.496701D-01
1	0.0	0.0	0.0	0.0	0.0
2	3.989766D 00	3.443961D 00	1.987412D 00	8.867019D-01	6.773136D-01
3	0.0	0.0	0.0	0.0	0.0
4	6.335198D 00	5.467416D 00	3.154564D 00	1.407582D 00	1.075592D 00
5	0.0	0.0	0.0	0.0	0.0
6	-3.695253D-03	-2.736448D-03	-1.507520D-03	-1.193465D-03	-1.625121D-03
7	0.0	0.0	0.0	0.0	0.0
8	-2.133936D-03	-1.666577E-03	-9.394534D-04	-6.537460D-04	-8.098360D-04
9	0.0	0.0	0.0	0.0	0.0
10	9.439666D-07	9.973244D-07	1.090779D-06	1.177417D-06	1.198525D-06
11	0.0	0.0	0.0	0.0	0.0
12	2.542544D-07	2.591024D-07	2.845345D-07	2.988094D-07	2.989246D-07
L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	1.420090D 00	2.322065D 00	3.398375D 00	4.031142D 00	3.564545D 00
1	0.0	0.0	0.0	0.0	0.0
2	1.012960D 00	1.656980D 00	2.425861D 00	2.878455D 00	2.546032D 00
3	0.0	0.0	0.0	0.0	0.0
4	1.6C8342D 00	2.629959D 00	3.849042D 00	4.555755D 00	4.037267D 00
5	0.0	0.0	0.0	0.0	0.0
6	-2.219424D-03	-2.634894D-03	-2.510525D-03	-1.525737D-03	-1.422763D-04
7	0.0	0.0	0.0	0.0	0.0
8	-1.142757D-03	-1.469129D-03	-1.568996D-03	-1.190795D-03	-4.861274D-04
9	0.0	0.0	0.0	0.0	0.0
10	1.231932D-06	1.254474D-06	1.245574D-06	1.216995D-06	1.195028D-06
11	0.0	0.0	0.0	0.0	0.0
12	3.155592D-07	3.371396D-07	3.5C2492D-07	3.464917D-07	3.271364D-07
L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	1.475754D 00	6.695254E-01	8.867487D-01	1.305363D 00	1.118910D 00
1	0.0	0.0	0.0	0.0	0.0
2	1.0C4604D 00	4.783243D-01	6.332163D-01	9.326504D-01	7.999691D-01
3	0.0	0.0	0.0	0.0	0.0
4	1.671333D 00	7.579515D-01	1.0035C9D 00	1.477341D 00	1.266432D 00
5	0.0	0.0	0.0	0.0	0.0
6	7.651576D-04	1.399002D-04	-2.839967D-04	3.807714D-04	1.163157D-03
7	0.0	0.0	0.0	0.0	0.0
8	1.610343D-04	-1.577135D-05	-2.246574D-04	-1.570804D-06	3.292871D-04
9	0.0	0.0	0.0	0.0	0.0
10	1.157296D-06	1.179562D-05	1.273144D-06	1.316616D-06	1.268273D-06
11	0.0	0.0	0.0	0.0	0.0
12	2.802174D-07	2.745664D-07	3.028748D-07	3.097087D-07	2.806264D-07

A-L COEFFICIENTS FOR C TO 1 TRANSITION

L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	7.433340D-01	4.937090E-01	3.867253D-01	3.674015D-01	3.497109D-01
1	0.0	0.0	0.0	0.0	0.0
2	5.317709D-01	3.534140C-01	2.768258D-01	2.630192D-01	2.504414D-01
3	0.0	0.0	0.0	0.0	0.0
4	8.413730D-01	5.589173C-01	4.376693D-01	4.157324D-01	3.956898D-01
5	0.0	0.0	0.0	0.0	0.0
6	1.264193D-03	1.085208D-03	9.237101D-04	9.182111D-04	1.003898D-03
7	0.0	0.0	0.0	0.0	0.0
8	4.020575D-04	3.687319C-04	3.237315D-04	3.145138D-04	3.314451D-04
9	0.0	0.0	0.0	0.0	0.0
10	1.221324D-06	1.259907D-06	1.332800D-06	1.348286D-06	1.310836D-06
11	0.0	0.0	0.0	0.0	0.0
12	2.593419D-07	2.709669D-07	2.915898D-07	2.870358D-07	2.646080D-07
L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	1.538040D-01	8.479628E-C2	5.206794D-02	3.530082D-02	2.559530D-02
1	0.0	0.0	0.0	0.0	0.0
2	1.104198D-01	6.102583C-02	3.757230D-02	2.552211D-02	1.855389D-02
3	0.0	0.0	0.0	0.0	0.0
4	1.740591D-01	9.598304E-02	5.895818D-02	3.998783D-02	2.901966D-02
5	0.0	0.0	0.0	0.0	0.0
6	8.603639D-04	6.997436D-04	5.863299D-04	4.645771D-04	4.119231D-04
7	0.0	0.0	0.0	0.0	0.0
8	2.932221D-04	2.359481D-04	1.862201D-04	1.637564D-04	1.473866D-04
9	0.0	0.0	0.0	0.0	0.0
10	1.349420D-06	1.421809D-06	1.470394D-06	1.475405D-06	1.628461D-06
11	0.0	0.0	0.0	0.0	0.0
12	2.625878D-07	2.672977D-07	2.553870D-07	2.647748D-07	3.164793D-07
L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	1.946837D-02	1.533876E-C2	1.241230D-02	8.614780D-03	6.314182D-03
1	0.0	0.0	0.0	0.0	0.0
2	1.415061D-02	1.117998D-02	9.072679D-03	6.334577D-03	4.672683D-03
3	0.0	0.0	0.0	0.0	0.0
4	2.209794D-02	1.743434C-02	1.413066D-02	9.841548D-03	7.243673D-03
5	0.0	0.0	0.0	0.0	0.0
6	3.723919D-04	3.415505C-04	3.170506D-04	2.777590D-04	2.492357D-04
7	0.0	0.0	0.0	0.0	0.0
8	1.0351242D-04	1.256558C-04	1.181607D-04	1.004859D-04	8.703877D-05
9	0.0	0.0	0.0	0.0	0.0
10	1.793956D-06	1.974001D-06	2.170792D-06	2.442559D-06	2.725620D-06
11	0.0	0.0	0.0	0.0	0.0
12	3.508370D-07	3.881924C-07	4.289087D-07	4.573371D-07	4.796970D-07

A-L COEFFICIENTS FOR 0 TO 2 TRANSITION

L	0.60 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	1.514410D-02	7.373020D-07	3.544135D-06	1.193736D-05	3.414069D-05
1	0.0	0.0	0.0	0.0	0.0
2	8.143103D-03	5.925185D-07	2.735120D-06	8.980383D-06	2.523461D-05
3	0.0	0.0	0.0	0.0	0.0
4	4.773631D-04	3.588962D-07	3.070732D-06	1.176855D-05	3.586282D-05
5	0.0	0.0	0.0	0.0	0.0
6	-2.147284D-03	1.315C04C-08	-1.742053D-C8	1.279208D-07	2.896712D-07
7	0.0	0.0	0.0	0.0	0.0
8	1.136101D-03	6.678931D-08	6.837805D-08	-4.179288D-08	6.424920D-08
9	0.0	0.0	0.0	0.0	0.0
10	-2.058221D-04	8.560263D-09	2.591275D-08	7.142506D-09	1.362952D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.694168D-05	8.324396D-11	1.758228D-10	1.671640D-10	2.484785D-12
L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	9.198060D-05	2.391387D-04	6.173017D-04	1.620272D-03	4.435633D-03
1	0.0	0.0	0.0	0.0	0.0
2	6.732766D-05	1.734464D-04	4.452690D-04	1.164677D-03	3.182542D-03
3	0.0	0.0	0.0	0.0	0.0
4	1.008037D-04	2.656406D-04	6.923625D-04	1.828834D-03	5.024827D-03
5	0.0	0.0	0.0	0.0	0.0
6	1.171273D-06	2.068467D-06	3.314187D-C6	6.012129D-06	1.371972D-05
7	0.0	0.0	0.0	0.0	0.0
8	5.263138D-07	1.145262D-06	2.280259D-C6	4.830335D-06	8.606006D-06
9	0.0	0.0	0.0	0.0	0.0
10	-5.520140D-09	-7.778077D-09	-9.730798D-10	-7.679526D-09	-6.019361D-10
11	0.0	0.0	0.0	0.0	0.0
12	7.705742D-10	1.359654D-09	2.076524D-09	3.724040D-09	4.444333D-09
L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	1.3C9378D-02	4.384196D-02	1.810977D-01	1.024113D 00	4.179633D 00
1	0.0	0.0	0.0	0.0	0.0
2	9.379910D-03	3.136696D-02	1.294604D-C1	7.317423D-01	2.985558D 00
3	0.0	0.0	0.0	0.0	0.0
4	1.4E5971D-02	4.978885D-02	2.057060D-01	1.163331D 00	4.747340D 00
5	0.0	0.0	0.0	0.0	0.0
6	2.806837D-05	5.493125D-C5	1.173287D-04	2.913719D-04	2.539197D-04
7	0.0	0.0	0.0	0.0	0.0
8	1.573683D-05	3.146619D-C5	6.093217D-05	9.784064D-05	-1.674776D-04
9	0.0	0.0	0.0	0.0	0.0
10	9.0E67646D-09	8.9966C9D-09	1.410237D-08	2.614904D-08	2.819537D-08
11	0.0	0.0	0.0	0.0	0.0
12	5.226C66D-09	6.755758D-09	7.476656D-09	8.087295D-09	9.371907D-09
L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	4.289212D 00	3.867469D 00	3.775636D 00	4.063652D 00	4.408652D 00
1	0.0	0.0	0.0	0.0	0.0
2	3.0E3595D 00	2.762258D 00	2.696659D 00	2.902441D 00	3.149019D 00
3	0.0	0.0	0.0	0.0	0.0
4	4.871316D 00	4.291822D 00	4.286960D 00	4.613326D 00	5.004271D 00
5	0.0	0.0	0.0	0.0	0.0
6	-1.159373D-05	-1.141926D-04	-1.190774D-04	-3.903486D-05	1.496537D-04
7	0.0	0.0	0.0	0.0	0.0
8	-3.360919D-04	-3.475824D-C4	-3.600837D-C4	-3.583824D-04	-3.018656D-04
9	0.0	0.0	0.0	0.0	0.0
10	2.171720D-08	2.624937D-08	2.314454D-C8	1.989724D-08	1.767083D-08
11	0.0	0.0	0.0	0.0	0.0
12	9.8E0998D-09	9.384C55D-C9	8.809688D-09	9.255826D-09	9.713613D-09

A-L COEFFICIENTS FOR 0 TO 2 TRANSITION

L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	3.693978D 00	1.777635D 00	5.440633D-01	2.453415D-01	5.598149D-01
1	0.0	0.0	0.0	0.0	0.0
2	2.638750D 00	1.269973D 00	3.887226D-01	1.752160D-01	3.997580D-01
3	0.0	0.0	0.0	0.0	0.0
4	4.192440D 00	2.017240D 00	6.173708D-01	2.784801D-01	6.352949D-01
5	0.0	0.0	0.0	0.0	0.0
6	3.726677D-04	3.473000E-04	1.480929D-04	-2.578683D-05	-1.159845D-04
7	0.0	0.0	0.0	0.0	0.0
8	-1.298821D-04	2.407409D-05	2.987424D-05	-3.396160D-05	-1.121306D-04
9	0.0	0.0	0.0	0.0	0.0
10	2.148737D-08	3.071438D-08	3.585898D-08	3.605751D-08	3.288843D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.018987D-08	1.068592D-08	1.120317D-08	1.174305D-08	1.230707D-08
L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	1.490491D 00	2.942847D 00	3.775891D 00	3.293753D 00	2.4227705D 00
1	0.0	0.0	0.0	0.0	0.0
2	1.064561D 00	2.102224D 00	2.697656D 00	2.353459D 00	1.734828D 00
3	0.0	0.0	0.0	0.0	0.0
4	1.690976D 00	3.338011D 00	4.282197D 00	3.734851D 00	2.752445D 00
5	0.0	0.0	0.0	0.0	0.0
6	-4.024384D-05	3.446538D-04	8.815200D-04	1.101993D-03	1.039507D-03
7	0.0	0.0	0.0	0.0	0.0
8	-1.682199D-04	-1.221223D-04	6.517174D-05	2.264303D-04	2.814461D-04
9	0.0	0.0	0.0	0.0	0.0
10	2.714391D-08	2.265955D-08	2.757635D-08	3.891657D-08	4.827284D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.2E9675D-08	1.352726D-08	1.399633D-08	1.425200D-08	1.435027D-08
L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	1.706996D 00	1.149349D 00	6.990196D-01	3.929750D-01	3.267392D-01
1	0.0	0.0	0.0	0.0	0.0
2	1.219938D 00	8.212837D-01	4.097003D-01	2.805782D-01	2.336261D-01
3	0.0	0.0	0.0	0.0	0.0
4	1.935085D 00	1.302435D 00	7.922581D-01	4.453767D-01	3.703010D-01
5	0.0	0.0	0.0	0.0	0.0
6	8.904634D-04	7.198668D-04	5.354589D-04	3.743062D-04	3.213807D-04
7	0.0	0.0	0.0	0.0	0.0
8	2.768705D-04	2.458584D-04	1.991253D-04	1.508532D-04	1.312276D-04
9	0.0	0.0	0.0	0.0	0.0
10	5.4E1348D-08	5.840740D-08	5.094937D-08	5.911615D-08	5.779583D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.441016D-08	1.455557D-08	1.485827D-08	1.531147D-08	1.583753D-08
L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	5.658413D-01	8.333976D-01	9.085325D-01	6.269617D-01	2.614530D-01
1	0.0	0.0	0.0	0.0	0.0
2	4.259579D-01	5.957540D-01	6.494555D-01	4.481583D-01	1.868944D-01
3	0.0	0.0	0.0	0.0	0.0
4	6.750962D-01	9.440320D-01	1.028936D 00	7.099378D-01	2.960246D-01
5	0.0	0.0	0.0	0.0	0.0
6	4.843655D-04	6.545207D-04	6.899849D-04	4.537117D-04	1.969691D-04
7	0.0	0.0	0.0	0.0	0.0
8	1.0E2696D-04	2.327682D-04	2.327385D-04	1.433966D-04	6.219347D-05
9	0.0	0.0	0.0	0.0	0.0
10	6.095245D-08	6.894618D-08	7.741062D-08	7.882239D-08	7.443708D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.667866D-08	1.692357D-08	1.702152D-08	1.754856D-08	1.834378D-08

A-L COEFFICIENTS FOR 0 TO 2 TRANSITION

L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	1.157207D-01	1.063209D-01	1.441146D-01	1.615192D-01	1.328028D-01
1	0.0	0.0	0.0	0.0	0.0
2	8.275013D-02	7.605254D-02	1.030670D-01	1.154789D-01	9.491901D-02
3	0.0	0.0	0.0	0.0	0.0
4	1.310123D-01	1.203425D-01	1.630762D-01	1.827330D-01	1.502207D-01
5	0.0	0.0	0.0	0.0	0.0
6	1.261001D-04	1.476434D-04	1.746755D-04	1.497760D-04	8.513364D-05
7	0.0	0.0	0.0	0.0	0.0
8	4.760082D-05	5.964743D-05	6.617634D-05	4.840068D-05	1.817694D-05
9	0.0	0.0	0.0	0.0	0.0
10	7.305812D-08	7.523832D-08	7.858221D-08	8.023984D-08	7.965445D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.870056D-08	1.862537D-08	1.886898D-08	1.948137D-08	1.982450D-08
L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	2.559063D-02	1.068884D-02	4.494004D-03	2.302603D-03	1.335571D-03
1	0.0	0.0	0.0	0.0	0.0
2	1.834515D-02	7.619646D-03	3.0197693D-03	1.634241D-03	9.455106D-04
3	0.0	0.0	0.0	0.0	0.0
4	2.904758D-02	1.207338D-02	5.073948D-03	2.597176D-03	1.505298D-03
5	0.0	0.0	0.0	0.0	0.0
6	-6.351290D-06	-2.078066D-05	-1.732075D-05	-1.421411D-05	-1.163129D-05
7	0.0	0.0	0.0	0.0	0.0
8	-9.407845D-06	-1.369750D-05	-1.049014D-05	-8.299430D-06	-5.680317D-06
9	0.0	0.0	0.0	0.0	0.0
10	8.034993D-08	8.373857D-08	8.462297D-08	8.714032D-08	8.960468D-08
11	0.0	0.0	0.0	0.0	0.0
12	2.075462D-08	2.153116D-08	2.060312D-08	2.164623D-08	2.273803D-08
L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	8.516E25D-04	5.827080D-04	4.206903D-04	2.467228D-04	1.618247D-04
1	0.0	0.0	0.0	0.0	0.0
2	6.013538D-04	4.103673D-04	2.954889D-04	1.724044D-04	1.125466D-04
3	0.0	0.0	0.0	0.0	0.0
4	9.591445D-04	6.557498D-04	4.730541D-04	2.769624D-04	1.813540D-04
5	0.0	0.0	0.0	0.0	0.0
6	-9.6P7471D-06	-8.198237D-06	-7.054164D-06	-5.482559D-06	-4.418739D-06
7	0.0	0.0	0.0	0.0	0.0
8	-5.524990D-06	-4.616F87D-06	-3.009859D-06	-2.977681D-06	-2.356932D-06
9	0.0	0.0	0.0	0.0	0.0
10	9.207C09D-08	9.463962D-08	9.590922D-08	1.015539D-07	1.053849D-07
11	0.0	0.0	0.0	0.0	0.0
12	2.390826D-08	2.444488D-08	2.465219D-08	2.564398D-08	2.621645D-08

A-L COEFFICIENTS FOR C TO 3 TRANSITION

L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	1.654095D-06	6.172783D-06	2.168256D-05	7.504982D-05	2.680358D-04
1	0.0	0.0	0.0	0.0	0.0
2	1.268481D-06	4.632931D-06	1.596882D-05	5.465067D-05	1.935719D-04
3	0.0	0.0	0.0	0.0	0.0
4	1.397780D-06	6.032355D-06	2.288970D-05	8.226623D-05	2.992625D-04
5	0.0	0.0	0.0	0.0	0.0
6	4.187551D-08	1.241305D-07	2.978163D-07	7.932965D-07	1.760068D-06
7	0.0	0.0	0.0	0.0	0.0
8	9.381999D-09	4.977643D-08	1.090512D-07	2.677005D-07	6.704316D-07
9	0.0	0.0	0.0	0.0	0.0
10	-8.858669D-10	-9.165317D-10	7.620539D-10	2.531354D-09	2.579352D-09
11	0.0	0.0	0.0	0.0	0.0
12	4.444710D-11	1.258201D-10	1.251521D-10	2.248824D-10	4.207256D-10
L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	1.029454D-03	4.503062D-03	2.459414D-02	1.879927D-01	1.075945D 00
1	0.0	0.0	0.0	0.0	0.0
2	7.397872D-04	3.226175D-03	1.759015D-02	1.343336D-01	7.684459D-01
3	0.0	0.0	0.0	0.0	0.0
4	1.160603D-03	5.100619D-03	2.791780D-02	2.135820D-01	1.222532D 00
5	0.0	0.0	0.0	0.0	0.0
6	3.895996D-06	8.793141D-06	2.209905D-05	5.820587D-05	2.582392D-05
7	0.0	0.0	0.0	0.0	0.0
8	1.549226D-06	3.788946D-06	9.288266D-06	1.815131D-05	-4.461752D-05
9	0.0	0.0	0.0	0.0	0.0
10	4.267964D-09	5.151695D-09	6.344442D-09	9.021710D-09	1.019985D-08
11	0.0	0.0	0.0	0.0	0.0
12	6.182448D-10	9.324326D-10	1.282152D-09	1.643591D-09	2.090250D-09
L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	1.334982D 00	1.484896D 00	1.837474D 00	2.604455D 00	3.937164D 00
1	0.0	0.0	0.0	0.0	0.0
2	9.534638D-01	1.060513D 00	1.312355D 00	1.860247D 00	2.812349D 00
3	0.0	0.0	0.0	0.0	0.0
4	1.516934D 00	1.687111D 00	2.087398D 00	2.958180D 00	4.471056D 00
5	0.0	0.0	0.0	0.0	0.0
6	-4.412003D-05	-6.990191D-05	-5.301408D-05	3.061443D-05	2.670852D-04
7	0.0	0.0	0.0	0.0	0.0
8	-9.525163D-05	-1.207032D-04	-1.395723D-04	-1.569684D-04	-1.399158D-04
9	0.0	0.0	0.0	0.0	0.0
10	9.147319D-09	8.489323D-09	7.862664D-09	6.211257D-09	5.033755D-09
11	0.0	0.0	0.0	0.0	0.0
12	2.313599D-09	2.526633D-09	2.742080D-09	3.052312D-09	3.269022D-09
L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	5.020834D 00	4.252797D 00	2.814792D 00	1.824295D 00	1.200014D 00
1	0.0	0.0	0.0	0.0	0.0
2	3.586727D 00	3.038337D 00	2.011158D 00	1.303565D 00	8.575514D-01
3	0.0	0.0	0.0	0.0	0.0
4	5.700603D 00	4.827705D 00	3.194756D 00	2.070218D 00	1.361567D 00
5	0.0	0.0	0.0	0.0	0.0
6	6.683514D-04	8.631488D-04	7.703756D-C4	6.255916D-04	4.931600D-04
7	0.0	0.0	0.0	0.0	0.0
8	-3.041978D-05	1.089816D-04	1.620402D-C4	1.616557D-04	1.430657D-04
9	0.0	0.0	0.0	0.0	0.0
10	6.898316D-09	1.334331D-08	1.896776D-C8	2.235198D-08	2.442732D-08
11	0.0	0.0	0.0	0.0	0.0
12	3.484132D-09	3.697528D-09	3.909292D-09	4.119608D-09	4.328771D-09

A-L CCEFFICIENTS FOR 3 TO 3 TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	7.214555D-01	3.062666D-01	1.296037D-01	2.691988D-01	5.252943D-01
1	0.0	0.0	0.0	0.0	0.0
2	5.156144D-01	2.189271D-01	9.267760D-02	1.924378D-01	3.754492D-01
3	0.0	0.0	0.0	0.0	0.0
4	8.184608D-01	3.474179C-01	1.470616D-01	3.053933D-01	5.957644D-01
5	0.0	0.0	0.0	0.0	0.0
6	3.527017D-04	1.967C73D-04	1.198325D-04	1.828956D-04	3.025488D-04
7	0.0	0.0	0.0	0.0	0.0
8	1.121002D-04	7.122100C-05	5.020692D-05	6.867738D-05	1.022818D-04
9	0.0	0.0	0.0	0.0	0.0
10	2.543176D-08	2.502619C-08	2.412472D-08	2.493690D-08	2.736260D-08
11	0.0	0.0	0.0	0.0	0.0
12	4.538577D-09	4.746513D-09	4.955585D-09	5.180113D-09	5.423560D-09
L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	8.138691D-01	1.143825C 00	1.479344D 00	1.629005D 00	1.395122D 00
1	0.0	0.0	0.0	0.0	0.0
2	5.816786D-01	8.174524C-01	1.057165D 00	1.164019D 00	9.967957D-01
3	0.0	0.0	0.0	0.0	0.0
4	9.229259D-01	1.296940C 00	1.677202D 00	1.846707D 00	1.581431D 00
5	0.0	0.0	0.0	0.0	0.0
6	4.305208D-04	5.552756D-04	6.403980D-04	5.982981D-04	3.998176D-04
7	0.0	0.0	0.0	0.0	0.0
8	1.350021D-04	1.599624C-04	1.623027D-04	1.192568D-04	4.068292D-05
9	0.0	0.0	0.0	0.0	0.0
10	3.061111D-08	3.442525C-08	3.823611D-08	4.016163D-08	3.857779D-08
11	0.0	0.0	0.0	0.0	0.0
12	5.676975D-09	5.925020D-09	6.155309D-09	6.355423D-09	6.563595D-09
L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	5.760068D-01	1.803168C-01	6.695226D-02	1.109791D-01	1.636411D-01
1	0.0	0.0	0.0	0.0	0.0
2	4.114401D-01	1.287540C-01	4.780044D-02	7.926583D-02	1.168546D-01
3	0.0	0.0	0.0	0.0	0.0
4	6.528289D-01	2.043679C-01	7.586676D-02	1.257067D-01	1.853150D-01
5	0.0	0.0	0.0	0.0	0.0
6	3.965952D-05	-4.647527D-05	-2.347942D-05	1.439683D-07	-2.857005D-05
7	0.0	0.0	0.0	0.0	0.0
8	-5.051273D-05	-4.685169D-05	-2.081614D-05	-1.572615D-05	-3.925581D-05
9	0.0	0.0	0.0	0.0	0.0
10	3.305604D-08	3.216552C-08	3.4545C6D-08	3.755675D-08	3.808382D-08
11	0.0	0.0	0.0	0.0	0.0
12	6.974123D-09	7.428587D-09	7.861427D-09	8.232373D-09	8.597504D-09
L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	1.690777D-01	1.547392D-01	1.249613D-01	7.941523D-02	3.921423D-02
1	0.0	0.0	0.0	0.0	0.0
2	1.207069D-01	1.104464D-01	8.917490D-02	5.666084D-02	2.795951D-02
3	0.0	0.0	0.0	0.0	0.0
4	1.914351D-01	1.751671D-01	1.414311D-C1	8.986654D-02	4.436960D-02
5	0.0	0.0	0.0	0.0	0.0
6	-6.566878D-05	-8.946804C-05	-9.355103D-05	-7.375923D-05	-4.757482D-05
7	0.0	0.0	0.0	0.0	0.0
8	-6.031297D-05	-7.130213D-05	-6.905434D-05	-5.144609D-05	-3.119085D-05
9	0.0	0.0	0.0	0.0	0.0
10	3.727933D-08	3.642932D-08	3.624263D-08	3.755557D-08	4.001277D-08
11	0.0	0.0	0.0	0.0	0.0
12	8.966599D-09	9.383306D-09	9.716182D-09	1.203155D-08	1.037294D-08

A-L COEFFICIENTS FOR 0 TO 3 TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	9.623012D-03	2.195960C-03	6.C52729D-04	2.179034D-04	9.106964D-05
1	0.0	0.0	0.0	0.0	0.0
2	6.853151D-03	1.567634E-03	4.331708D-04	1.568691D-04	6.608435D-05
3	0.0	0.0	0.0	0.0	0.0
4	1.087162D-02	2.475834D-03	6.805549D-04	2.440305D-04	1.014381D-04
5	0.0	0.0	0.0	0.0	0.0
6	-2.499072D-05	-1.026687D-06	1.030807D-06	1.479853D-06	1.209368D-06
7	0.0	0.0	0.0	0.0	0.0
8	-1.487188D-05	-9.843243D-07	4.402733D-07	7.661265D-07	6.655882D-07
9	0.0	0.0	0.0	0.0	0.0
10	4.702701D-08	5.384718D-08	5.849330D-08	6.224673D-08	6.535146D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.187335D-08	1.304903D-08	1.398422D-08	1.478632D-08	1.549956D-08

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	4.421563D-05	2.401437D-05	1.421571D-05	6.C32930D-06	3.085559D-06
1	0.0	0.0	0.0	0.0	0.0
2	3.240039D-05	1.780216D-05	1.678730D-05	4.673991D-06	2.477414D-06
3	0.0	0.0	0.0	0.0	0.0
4	4.888436D-05	2.628412D-05	1.535319D-05	6.262224D-06	3.010505D-06
5	0.0	0.0	0.0	0.0	0.0
6	9.150133D-07	6.873191D-C7	5.209167D-07	3.056185D-07	1.814991D-07
7	0.0	0.0	0.0	0.0	0.0
8	5.318174D-07	4.234169C-07	3.421277D-C7	2.372893D-07	1.772995D-07
9	0.0	0.0	0.0	0.0	0.0
10	6.805810D-08	7.050600D-08	7.290128D-C8	7.688180D-08	8.024663D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.623704D-08	1.684093D-08	1.735383D-08	1.831609D-08	1.906899D-08

A-L COEFFICIENTS FOR 0 TO 4 TRANSITION

L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	4.459401D-05	2.795809C-04	2.095236D-03	2.155710D-02	1.658658D-01
1	0.0	0.0	0.0	0.0	0.0
2	3.167175D-05	1.990147D-04	1.494524D-03	1.539385D-02	1.185018D-01
3	0.0	0.0	0.0	0.0	0.0
4	5.199403D-05	3.213129C-04	2.391525D-03	2.452916D-02	1.884982D-01
5	0.0	0.0	0.0	0.0	0.0
6	-1.343258D-07	-5.369877D-07	-1.580798D-06	-2.602734D-06	2.934662D-05
7	0.0	0.0	0.0	0.0	0.0
8	-5.670234D-08	-1.996805C-07	-6.803811D-07	-1.744767D-06	5.652413D-06
9	0.0	0.0	0.0	0.0	0.0
10	-1.302208D-10	2.295904C-11	1.551060D-10	2.990506D-10	6.785066D-10
11	0.0	0.0	0.0	0.0	0.0
12	1.945296D-11	4.151710C-11	8.081068D-11	1.346001D-10	2.014743D-10
L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	2.3974200-01	3.124643C-01	4.568265D-01	7.736910D-01	1.418813D 00
1	0.0	0.0	0.0	0.0	0.0
2	1.712963D-01	2.232601D-01	3.263996D-01	5.527687D-01	1.013618D 00
3	0.0	0.0	0.0	0.0	0.0
4	2.723931D-01	3.549679C-01	5.189406D-01	8.788639D-01	1.611626D 00
5	0.0	0.0	0.0	0.0	0.0
6	5.569920D-05	7.679704C-05	1.055285D-04	1.551987D-04	2.321172D-04
7	0.0	0.0	0.0	0.0	0.0
8	1.336759D-05	1.895022C-05	2.443652D-05	3.004552D-05	2.917244D-05
9	0.0	0.0	0.0	0.0	0.0
10	1.031348D-09	1.428120C-09	1.907803D-09	2.572377D-09	3.377813D-09
11	0.0	0.0	0.0	0.0	0.0
12	2.430968D-10	2.884132C-10	3.357667D-10	3.855838D-10	4.397001D-10
L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	2.240167D 00	2.416367C 00	2.119909D 00	1.933406D 00	1.968521D 00
1	0.0	0.0	0.0	0.0	0.0
2	1.600309D 00	1.726093C 00	1.514268D 00	1.381021D 00	1.406103D 00
3	0.0	0.0	0.0	0.0	0.0
4	2.544468D 00	2.744401C 00	2.407482D 00	2.195450D 00	2.235059D 00
5	0.0	0.0	0.0	0.0	0.0
6	2.837165D-04	2.286330D-04	1.510013D-04	1.147292D-04	1.197992D-04
7	0.0	0.0	0.0	0.0	0.0
8	3.790271D-06	-3.714518C-05	-6.080317D-05	-7.148902D-05	-7.718337D-05
9	0.0	0.0	0.0	0.0	0.0
10	3.672208D-09	2.823140C-09	1.797218D-09	1.074154D-09	4.267237D-10
11	0.0	0.0	0.0	0.0	0.0
12	4.584192D-10	5.603288C-10	6.228247D-10	6.913369D-10	7.620519D-10
L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	2.157964D 00	2.200596C 00	1.666896D 00	9.090820D-01	4.139534D-01
1	0.0	0.0	0.0	0.0	0.0
2	1.541454D 00	1.571973C 00	1.190806D 00	6.494942D-01	2.957869D-01
3	0.0	0.0	0.0	0.0	0.0
4	2.449826D 00	2.497843C 00	1.891729D 00	1.031507D 00	4.696057D-01
5	0.0	0.0	0.0	0.0	0.0
6	1.661130D-04	2.390513C-04	2.618557D-04	2.048274D-04	1.330035D-04
7	0.0	0.0	0.0	0.0	0.0
8	-7.490070D-05	-5.049290C-05	-5.377323D-06	2.358915D-05	2.841594D-05
9	0.0	0.0	0.0	0.0	0.0
10	-1.823830D-10	-1.316958D-10	1.461363D-09	3.508916D-09	4.783073D-09
11	0.0	0.0	0.0	0.0	0.0
12	8.345530D-10	9.084471C-10	9.833180D-10	1.058965D-09	1.137799D-09

A-L CCEFFICIENTS FOR 0 TO 4 TRANSITION

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	1.613458D-01	4.883371C-02	3.916957D-02	1.285546D-01	2.634028D-01
1	0.0	0.0	0.0	0.0	0.0
2	1.153105D-01	3.490914D-02	2.798285D-02	9.183315D-02	1.881900D-01
3	0.0	0.0	0.0	0.0	0.0
4	1.830020D-01	5.539291C-02	4.446750D-02	1.458604D-01	2.987488D-01
5	0.0	0.0	0.0	0.0	0.0
6	7.522006D-05	3.172457D-05	6.523101D-06	1.589092D-05	6.352305D-05
7	0.0	0.0	0.0	0.0	0.0
8	2.195587D-05	1.128462D-05	5.482910D-07	-3.091458D-06	6.325773D-06
9	0.0	0.0	0.0	0.0	0.0
10	5.364024D-09	5.475585C-09	5.220151D-09	4.885122D-09	5.092205D-09
11	0.0	0.0	0.0	0.0	0.0
12	1.217852D-09	1.297217C-09	1.375322D-09	1.453119D-09	1.532194D-09
L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	3.975898D-01	4.272795C-01	4.276806D-01	3.063948D-01	1.391897D-01
1	0.0	0.0	0.0	0.0	0.0
2	2.841177D-01	3.053656C-01	3.056582D-01	2.189606D-01	9.945180D-02
3	0.0	0.0	0.0	0.0	0.0
4	4.507456D-01	4.842545C-01	4.845916D-01	3.471000D-01	1.576581D-01
5	0.0	0.0	0.0	0.0	0.0
6	1.596389D-04	2.088381C-04	2.183355D-04	1.402164D-04	4.389030D-05
7	0.0	0.0	0.0	0.0	0.0
8	3.673404D-05	5.450716D-05	5.609425D-05	3.019985D-05	3.035564D-06
9	0.0	0.0	0.0	0.0	0.0
10	7.229351D-09	9.779073C-09	1.214337D-08	1.274116D-08	1.172775D-08
11	0.0	0.0	0.0	0.0	0.0
12	1.696822D-09	1.863546C-09	2.024844D-09	2.186074D-09	2.351208D-09
L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	5.163142D-02	1.839699D-02	9.787493D-03	1.211448D-02	1.522965D-02
1	0.0	0.0	0.0	0.0	0.0
2	3.687952D-02	1.313616C-02	6.990850D-03	8.655658D-03	1.087748D-02
3	0.0	0.0	0.0	0.0	0.0
4	5.847639D-02	2.083480C-02	1.108133D-02	1.370962D-02	1.723028D-02
5	0.0	0.0	0.0	0.0	0.0
6	3.417919D-06	-4.049664C-06	2.943228D-07	3.606284D-06	7.488204D-08
7	0.0	0.0	0.0	0.0	0.0
8	-5.585382D-06	-4.704865C-06	-1.354841D-06	-2.214348D-07	-2.692946D-06
9	0.0	0.0	0.0	0.0	0.0
10	1.127797D-08	1.163064D-08	1.243972D-08	1.330526D-08	1.389557D-08
11	0.0	0.0	0.0	0.0	0.0
12	2.513507D-09	2.669714C-09	2.825549D-09	2.982534D-09	3.134844D-09
L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	6.733093D-03	4.676369C-04	1.439791D-04	3.302861D-05	9.117561D-06
1	0.0	0.0	0.0	0.0	0.0
2	4.794781D-03	3.305613C-04	1.012506D-04	2.314303D-05	6.347369D-06
3	0.0	0.0	0.0	0.0	0.0
4	7.605013D-03	5.266586D-04	1.612468D-04	3.655369D-05	9.864815D-06
5	0.0	0.0	0.0	0.0	0.0
6	-1.680745D-05	-4.235438C-06	-2.006059D-06	-6.218726D-07	-2.815581D-07
7	0.0	0.0	0.0	0.0	0.0
8	-1.011974D-05	-2.268999C-06	-1.057557D-06	-3.119325D-07	-1.251463D-07
9	0.0	0.0	0.0	0.0	0.0
10	1.519650D-08	1.840621D-08	2.090178D-08	2.315674D-08	2.510650D-08
11	0.0	0.0	0.0	0.0	0.0
12	3.246627D-09	4.506159D-09	5.055085D-09	5.525415D-09	5.949939D-09

A-L COEFFICIENTS FOR 0 TO 4 TRANSITION

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	3.214961D-06	1.374064E-06	7.041731D-07	3.000912D-07	2.013018D-07
1	0.0	0.0	0.0	0.0	0.0
2	2.223928D-06	9.473438D-07	4.885512D-07	2.201788D-07	1.608981D-07
3	0.0	0.0	0.0	0.0	0.0
4	3.333888D-06	1.322168C-06	6.021307D-07	1.807575D-07	8.462392D-08
5	0.0	0.0	0.0	0.0	0.0
6	-1.712932D-07	-1.261685C-07	-1.031364D-07	-7.918276D-08	-6.521386D-08
7	0.0	0.0	0.0	0.0	0.0
8	-6.376839D-08	-3.764752D-08	-2.393109D-08	-8.998749D-09	6.589138D-11
9	0.0	0.0	0.0	0.0	0.0
10	2.676106D-08	2.827128C-08	2.961107D-08	3.193919D-08	3.388686D-08
11	0.0	0.0	0.0	0.0	0.0
12	6.329500D-09	6.670580C-09	6.979461D-09	7.517552D-09	7.961768D-09

A-L COEFFICIENTS FOR 0 TO 5 TRANSITION

L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	5.100546D-07	7.126423D-06	8.826548D-05	1.335544D-03	1.433761D-02
1	0.0	0.0	0.0	0.0	0.0
2	3.643268D-07	5.090530E-06	6.304699D-05	9.540083D-04	1.024179D-02
3	0.0	0.0	0.0	0.0	0.0
4	5.809959D-07	8.117971D-06	1.004753D-04	1.519233D-03	1.630541D-02
5	0.0	0.0	0.0	0.0	0.0
6	-3.971687D-10	6.675455C-10	1.197049D-09	7.593551D-08	9.711219D-07
7	0.0	0.0	0.0	0.0	0.0
8	4.758262D-10	-3.933261D-10	-4.055341D-10	5.469298D-10	1.300547D-09
9	0.0	0.0	0.0	0.0	0.0
10	-6.454857D-13	1.584996D-14	3.343177D-14	1.239523D-15	1.524783D-14
11	0.0	0.0	0.0	0.0	0.0
12	1.219286D-13	7.231965C-15	9.383484D-16	1.758606D-16	3.238362D-17
L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	2.423804D-02	3.683155D-02	6.271921D-02	1.238362D-01	2.654996D-01
1	0.0	0.0	0.0	0.0	0.0
2	1.731407D-02	2.631017C-02	4.480296D-02	8.846186D-02	1.896594D-01
3	0.0	0.0	0.0	0.0	0.0
4	2.755538D-02	4.187523C-02	7.129650D-02	1.407506D-01	3.017254D-01
5	0.0	0.0	0.0	0.0	0.0
6	1.784335D-06	2.901100D-06	5.363581D-06	1.134692D-05	2.567856D-05
7	0.0	0.0	0.0	0.0	0.0
8	1.651272D-09	1.376306C-C9	3.368972D-09	6.439529D-09	7.016253D-09
9	0.0	0.0	0.0	0.0	0.0
10	8.718543D-14	6.605133D-14	1.180298D-13	1.810092D-13	2.232050D-13
11	0.0	0.0	0.0	0.0	0.0
12	3.573450D-17	7.548926D-17	9.920393D-17	9.996967D-17	6.343490D-17
L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	4.924650D-01	6.284714C-01	6.587386D-01	7.272968D-01	9.124700D-01
1	0.0	0.0	0.0	0.0	0.0
2	3.517933D-01	4.489514D-01	4.705751D-01	5.195529D-01	6.518374D-01
3	0.0	0.0	0.0	0.0	0.0
4	5.595976D-01	7.140705C-01	7.483653D-01	8.261417D-01	1.036338D 00
5	0.0	0.0	0.0	0.0	0.0
6	4.975885D-05	6.621452C-05	7.277483D-05	8.463494D-05	1.120020D-04
7	0.0	0.0	0.0	0.0	0.0
8	5.860024D-10	-1.041885C-08	-2.495741D-08	-3.340422D-08	-4.124068D-08
9	0.0	0.0	0.0	0.0	0.0
10	1.839857D-13	-1.203908C-14	-1.844208D-13	-4.049035D-13	-8.250614D-13
11	0.0	0.0	0.0	0.0	0.0
12	5.624481D-17	9.483237D-17	3.464433D-16	4.497411D-16	4.378389D-16
L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	1.262705D 00	1.680932C 00	1.744660D 00	1.403333D 00	1.062494D 00
1	0.0	0.0	0.0	0.0	0.0
2	9.020385D-01	1.200814C 00	1.246347D 00	1.002515D 00	7.590304D-01
3	0.0	0.0	0.0	0.0	0.0
4	1.433924D 00	1.908617C 00	1.980743D 00	1.593045D 00	1.205989D 00
5	0.0	0.0	0.0	0.0	0.0
6	1.630326D-04	2.271658C-04	2.457557D-04	2.055533D-04	1.617790D-04
7	0.0	0.0	0.0	0.0	0.0
8	-5.024521D-08	-6.719737C-08	-3.766042D-09	5.526397D-08	8.441067D-08
9	0.0	0.0	0.0	0.0	0.0
10	-1.6742300-12	-4.251340C-12	-3.302234D-12	-1.058470D-12	8.456070D-13
11	0.0	0.0	0.0	0.0	0.0
12	5.027306D-16	2.005168C-15	2.212918D-15	2.411764D-15	2.618229D-15

A-L COEFFICIENTS FOR 0 TO 5 TRANSITION

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	8.507741D-01	7.283365E-01	6.289158D-01	4.846896D-01	2.938815D-01
1	0.0	0.0	0.0	0.0	0.0
2	6.077841D-01	5.203190E-01	4.492961D-01	3.462632D-01	2.099506D-01
3	0.0	0.0	0.0	0.0	0.0
4	9.655597D-01	8.265018E-01	7.135940D-01	5.498835D-01	3.333729D-01
5	0.0	0.0	0.0	0.0	0.0
6	1.347235D-04	1.199442E-04	1.075860D-04	8.593763D-05	5.383462D-05
7	0.0	0.0	0.0	0.0	0.0
8	9.528450D-08	9.602960E-08	8.705814D-08	6.147032D-08	2.650095D-08
9	0.0	0.0	0.0	0.0	0.0
10	2.224555D-12	3.292045E-12	4.108580D-12	4.105681D-12	2.988532D-12
11	0.0	0.0	0.0	0.0	0.0
12	2.793116D-15	2.927399E-15	3.242807D-15	3.764055D-15	4.318219D-15
L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	5.255974D-02	6.718102D-03	3.286859D-02	7.968883D-02	9.172047D-02
1	0.0	0.0	0.0	0.0	0.0
2	3.754920D-02	4.799230D-03	2.348189D-02	5.693237D-02	6.552911D-02
3	0.0	0.0	0.0	0.0	0.0
4	5.961381D-02	7.626466E-03	3.727232D-02	9.032625D-02	1.039345D-01
5	0.0	0.0	0.0	0.0	0.0
6	9.986604D-06	8.845642D-07	6.567136D-06	1.796553D-05	2.215777D-05
7	0.0	0.0	0.0	0.0	0.0
8	-4.633527D-09	4.934782D-09	2.369936D-08	2.183359D-08	-5.955397D-09
9	0.0	0.0	0.0	0.0	0.0
10	6.773329D-13	4.231570D-13	1.730278D-12	2.964344D-12	2.118496D-12
11	0.0	0.0	0.0	0.0	0.0
12	4.907703D-15	5.376096D-15	6.654144D-15	7.633900D-15	8.026211D-15
L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	8.325923D-02	7.443916E-02	6.367529D-02	4.573886D-02	2.649796D-02
1	0.0	0.0	0.0	0.0	0.0
2	5.948481D-02	5.318400D-02	4.549427D-02	3.267969D-02	1.893271D-02
3	0.0	0.0	0.0	0.0	0.0
4	9.432207D-02	8.430791D-02	7.209734D-02	5.177353D-02	2.998463D-02
5	0.0	0.0	0.0	0.0	0.0
6	2.133921D-05	2.020031D-05	1.829223D-05	1.392909D-05	8.579500D-06
7	0.0	0.0	0.0	0.0	0.0
8	-3.157431D-08	-4.827919C-08	-5.386154D-08	-4.384418D-08	-2.546782D-08
9	0.0	0.0	0.0	0.0	0.0
10	4.163450D-13	-1.311477E-12	-2.931433D-12	-3.726692D-12	-3.248061D-12
11	0.0	0.0	0.0	0.0	0.0
12	9.209871D-15	1.072306E-14	1.133270D-14	1.203290D-14	1.361032D-14
L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	8.412280D-04	2.722320E-04	6.743280D-05	7.717380D-06	1.510592D-06
1	0.0	0.0	0.0	0.0	0.0
2	6.011318D-04	1.945712E-04	4.822210D-05	5.525116D-06	1.083710D-06
3	0.0	0.0	0.0	0.0	0.0
4	9.500282D-04	3.066255D-04	7.552756D-05	8.564821D-06	1.654791D-06
5	0.0	0.0	0.0	0.0	0.0
6	3.6E4389D-07	1.808195E-07	8.284119D-08	1.852432D-08	6.784714D-09
7	0.0	0.0	0.0	0.0	0.0
8	2.734318D-09	2.778118E-09	3.098468D-09	1.104606D-09	5.167723D-10
9	0.0	0.0	0.0	0.0	0.0
10	-1.319476D-13	5.579801E-15	8.561742D-13	7.588087D-13	6.688414D-13
11	0.0	0.0	0.0	0.0	0.0
12	1.881198D-14	2.949436E-14	3.533807D-14	3.947362D-14	4.325759D-14

A-L COEFFICIENTS FOR 0 TO 5 TRANSITION

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	4.051207D-07	1.373894D-07	6.047203D-08	2.143071D-08	1.173025D-08
1	0.0	0.0	0.0	0.0	0.0
2	2.916772D-07	9.942611D-08	4.400742D-08	1.571674D-08	8.626886D-09
3	0.0	0.0	0.0	0.0	0.0
4	4.362511D-07	1.455083D-07	6.348996D-08	2.280255D-08	1.283279D-08
5	0.0	0.0	0.0	0.0	0.0
6	3.281694D-09	1.817979D-09	1.133508D-09	5.597897D-10	3.337601D-10
7	0.0	0.0	0.0	0.0	0.0
8	2.875627D-10	1.795146E-10	1.232536D-10	6.937615D-11	4.484721D-11
9	0.0	0.0	0.0	0.0	0.0
10	6.426475D-13	6.328076D-13	6.348131D-13	6.601551D-13	7.060115D-13
11	0.0	0.0	0.0	0.0	0.0
12	4.712216D-14	5.080309D-14	5.416753D-14	5.955755D-14	6.453069D-14

A-L COEFFICIENTS FOR 0 TO 6 TRANSITION

L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	1.029799D-03	1.973493D-03	4.128103D-03	9.828155D-03	2.508530D-02
1	0.0	0.0	0.0	0.0	0.0
2	7.354541D-04	1.409578D-03	2.948593D-03	7.020182D-03	1.791878D-02
3	0.0	0.0	0.0	0.0	0.0
4	1.189591D-03	2.246466D-03	4.696844D-03	1.117893D-02	2.852578D-02
5	0.0	0.0	0.0	0.0	0.0
6	-8.372885D-08	2.237719D-08	1.174584D-07	4.250107D-07	1.475098D-06
7	0.0	0.0	0.0	0.0	0.0
8	-8.591124D-09	-1.895166D-08	-3.796975D-08	-6.509490D-08	-8.501729D-08
9	0.0	0.0	0.0	0.0	0.0
10	1.404410D-11	-3.683554E-13	-1.297718D-12	-1.900172D-12	-2.743758D-12
11	0.0	0.0	0.0	0.0	0.0
12	2.148649D-14	4.310523D-14	8.440438D-14	1.348842D-13	2.034573D-13
L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	5.492062D-02	8.228597D-02	1.009791D-01	1.304671D-01	1.918476D-01
1	0.0	0.0	0.0	0.0	0.0
2	3.923166D-02	5.878106D-02	7.213573D-02	9.320165D-02	1.370502D-01
3	0.0	0.0	0.0	0.0	0.0
4	6.243735D-02	9.352218D-02	1.147514D-01	1.482407D-01	2.179624D-01
5	0.0	0.0	0.0	0.0	0.0
6	4.104767D-06	7.402003D-06	1.029711D-05	1.431289D-05	2.172863D-05
7	0.0	0.0	0.0	0.0	0.0
8	-1.211474D-08	2.017813D-07	4.417276D-07	6.749329D-07	9.410872D-07
9	0.0	0.0	0.0	0.0	0.0
10	-3.716526D-12	-1.646183D-12	4.815030D-12	1.343140D-11	2.591362D-11
11	0.0	0.0	0.0	0.0	0.0
12	3.036547D-13	4.319215D-13	6.316824D-13	8.530444D-13	1.122302D-12
L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	3.122709D-01	4.917225E-01	6.085274D-01	5.899057D-01	5.459537D-01
1	0.0	0.0	0.0	0.0	0.0
2	2.230763D-01	3.512689D-01	4.347078D-01	4.214036D-01	3.900054D-01
3	0.0	0.0	0.0	0.0	0.0
4	3.547502D-01	5.585654D-01	6.911782D-01	6.699526D-01	6.199658D-01
5	0.0	0.0	0.0	0.0	0.0
6	3.565450D-05	5.617003D-05	6.973074D-05	6.822264D-05	6.416874D-05
7	0.0	0.0	0.0	0.0	0.0
8	1.168367D-06	9.494217E-07	-1.290009D-07	-1.382424D-06	-2.260972D-06
9	0.0	0.0	0.0	0.0	0.0
10	4.403816D-11	6.176737D-11	5.587949D-11	2.463501D-11	-1.102063D-11
11	0.0	0.0	0.0	0.0	0.0
12	1.450119D-12	1.837461D-12	2.280821D-12	2.781993D-12	3.348119D-12
L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	5.444224D-01	5.949743D-01	6.780714D-01	7.225140D-01	6.479031D-01
1	0.0	0.0	0.0	0.0	0.0
2	3.889117D-01	4.250255D-01	4.843904D-01	5.161448D-01	4.623520D-01
3	0.0	0.0	0.0	0.0	0.0
4	6.181568D-01	6.754791D-01	7.697283D-01	8.200725D-01	7.352348D-01
5	0.0	0.0	0.0	0.0	0.0
6	6.560495D-05	7.445491D-05	8.953936D-05	1.022860D-04	9.950182D-05
7	0.0	0.0	0.0	0.0	0.0
8	-2.910534D-06	-3.403300D-06	-3.495718D-06	-2.619726D-06	-7.739250D-07
9	0.0	0.0	0.0	0.0	0.0
10	-4.812324D-11	-8.855702D-11	-1.301466D-10	-1.482055D-10	-1.128446D-10
11	0.0	0.0	0.0	0.0	0.0
12	4.005602D-12	4.704616D-12	5.462683D-12	6.280175D-12	7.158390D-12

A-L COEFFICIENTS FOR 0 TO 6 TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	3.676815D-01	2.223047D-01	1.504499D-01	8.000337D-02	2.788273D-02
1	0.0	0.0	0.0	0.0	0.0
2	2.626760D-01	1.588233D-01	1.074906D-01	5.715959D-02	1.992053D-02
3	0.0	0.0	0.0	0.0	0.0
4	4.171492D-01	2.521431D-01	1.706013D-01	9.070008D-02	3.160622D-02
5	0.0	0.0	0.0	0.0	0.0
6	6.715069D-05	4.736239D-05	3.572007D-05	1.972853D-05	6.344733D-06
7	0.0	0.0	0.0	0.0	0.0
8	2.098555D-06	2.997747D-06	2.854780D-06	1.439655D-06	1.381822D-07
9	0.0	0.0	0.0	0.0	0.0
10	2.545468D-11	1.278179D-10	1.963381D-10	1.897239D-10	1.328715D-10
11	0.0	0.0	0.0	0.0	0.0
12	9.107972D-12	1.134164E-11	1.381231D-11	1.647074D-11	1.935185D-11
L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	7.587649D-03	1.725715D-03	1.241135D-03	2.737580D-03	3.907748D-03
1	0.0	0.0	0.0	0.0	0.0
2	5.420369D-03	1.232659D-03	8.869981D-04	1.956365D-03	2.792086D-03
3	0.0	0.0	0.0	0.0	0.0
4	8.600917D-03	1.956959D-03	1.406461D-03	3.099600D-03	4.423192D-03
5	0.0	0.0	0.0	0.0	0.0
6	1.206201D-06	1.181251D-07	5.487217D-07	1.198473D-06	1.237691D-06
7	0.0	0.0	0.0	0.0	0.0
8	-2.124756D-07	-9.787839D-08	1.359341D-07	2.112872D-07	2.484710D-08
9	0.0	0.0	0.0	0.0	0.0
10	1.061858D-10	1.134359D-10	1.437528D-10	1.787501D-10	1.963141D-10
11	0.0	0.0	0.0	0.0	0.0
12	2.242978D-11	2.564448E-11	2.901043D-11	3.252720D-11	3.613919D-11
L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	2.626639D-03	3.144920D-04	2.082549D-05	1.432961D-06	3.062944D-07
1	0.0	0.0	0.0	0.0	0.0
2	1.875418D-03	2.248113D-04	1.503788D-05	1.072733D-06	2.453022D-07
3	0.0	0.0	0.0	0.0	0.0
4	2.968201D-03	3.541175D-04	2.326460D-05	1.570402D-06	3.236235D-07
5	0.0	0.0	0.0	0.0	0.0
6	-4.469662D-07	2.507044D-07	1.861658D-07	5.380745D-08	2.757408D-08
7	0.0	0.0	0.0	0.0	0.0
8	-7.581680D-07	2.549506D-08	8.105727D-08	2.564604D-08	1.360037D-08
9	0.0	0.0	0.0	0.0	0.0
10	1.544492D-10	2.858988E-10	4.151705D-10	4.945120D-10	5.737386D-10
11	0.0	0.0	0.0	0.0	0.0
12	5.534200D-11	7.524849D-11	9.503607D-11	1.142000D-10	1.320758D-10
L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	5.946207D-08	1.589101D-08	7.935281D-09	5.576393D-09	5.214711D-09
1	0.0	0.0	0.0	0.0	0.0
2	5.647841D-08	1.966149D-08	1.149575D-08	7.902479D-09	6.962426D-09
3	0.0	0.0	0.0	0.0	0.0
4	5.607588D-08	1.053398D-08	2.776042D-09	9.039543D-10	7.680445D-10
5	0.0	0.0	0.0	0.0	0.0
6	1.295660D-08	6.342135D-09	3.477786D-09	1.317886D-09	5.772253D-10
7	0.0	0.0	0.0	0.0	0.0
8	6.830569D-09	3.779769D-09	2.487933D-09	1.579933D-09	1.324622D-09
9	0.0	0.0	0.0	0.0	0.0
10	6.467835D-10	7.142269D-10	7.770054D-10	8.895466D-10	9.866497D-10
11	0.0	0.0	0.0	0.0	0.0
12	1.487086D-10	1.641029E-10	1.783269D-10	2.036761D-10	2.255738D-10

A-L COEFFICIENTS FOR 0 TO 7 TRANSITION

L	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	6.793756D-06	3.9441230-05	1.762760D-04	6.902899D-04
1	0.0	0.0	0.0	0.0
2	4.856551D-06	2.817435D-05	1.259164D-04	4.930894D-04
3	0.0	0.0	0.0	0.0
4	3.291666D-06	4.458771D-05	2.005566D-04	7.853864D-04
5	0.0	0.0	0.0	0.0
6	-3.550533D-08	7.430871D-10	7.589698D-09	3.952696D-08
7	0.0	0.0	0.0	0.0
8	6.012499E-08	3.244877D-09	-1.735782D-10	-1.201916D-09
9	0.0	0.0	0.0	0.0
10	-2.911778E-10	-6.547700D-14	-4.581751D-15	-6.014275D-14
11	0.0	0.0	0.0	0.0
12	1.304688D-10	7.002538D-14	6.039781D-17	1.674531D-15
L	2.30 EV	2.35 EV	2.40 EV	2.45 EV
0	2.090500D-03	4.077846E-03	6.255919D-03	9.843667D-03
1	0.0	0.0	0.0	0.0
2	1.493283D-03	2.912803D-03	4.468767D-03	7.031619D-03
3	0.0	0.0	0.0	0.0
4	2.379443D-03	4.653250D-03	7.113979D-03	1.119158D-02
5	0.0	0.0	0.0	0.0
6	1.111014D-07	1.157296E-07	3.917395D-07	6.616076D-07
7	0.0	0.0	0.0	0.0
8	-3.431190D-10	1.291033D-08	1.527416D-09	1.215127D-10
9	0.0	0.0	0.0	0.0
10	-1.414067D-13	1.199547D-13	1.124457D-14	6.551664D-15
11	0.0	0.0	0.0	0.0
12	6.614893D-15	4.223286D-14	1.231321D-16	3.063604D-18
L	2.55 EV	2.60 EV	2.65 EV	2.70 EV
0	3.324539D-02	6.122011D-02	8.804535D-02	9.878743D-02
1	0.0	0.0	0.0	0.0
2	2.374836D-02	4.373203E-02	6.289484D-02	7.056879D-02
3	0.0	0.0	0.0	0.0
4	3.778832D-02	6.957367D-02	1.000430D-01	1.122345D-01
5	0.0	0.0	0.0	0.0
6	2.542020D-06	5.175774D-06	8.113965D-06	9.674986D-06
7	0.0	0.0	0.0	0.0
8	-2.711351D-09	-3.496798D-09	-1.050379D-09	3.843892D-09
9	0.0	0.0	0.0	0.0
10	-5.504461D-14	-1.222817D-13	-1.474154D-13	-7.771745D-14
11	0.0	0.0	0.0	0.0
12	5.788982D-17	1.036078E-16	1.433589D-16	2.059731D-16
L	2.80 EV	2.85 EV	2.90 EV	2.95 EV
0	1.214807D-01	1.532561E-01	2.019893D-01	2.496422D-01
1	0.0	0.0	0.0	0.0
2	8.678051D-02	1.094800E-01	1.442940D-01	1.783367D-01
3	0.0	0.0	0.0	0.0
4	1.379876D-01	1.740584E-01	2.293742D-01	2.834481D-01
5	0.0	0.0	0.0	0.0
6	1.304688D-05	1.738787E-05	2.432425D-05	3.180155D-05
7	0.0	0.0	0.0	0.0
8	1.353508D-08	1.828340D-08	2.184120D-08	1.978171D-08
9	0.0	0.0	0.0	0.0
10	1.824487D-13	3.986431D-13	7.132233D-13	1.001273D-12
11	0.0	0.0	0.0	0.0
12	4.138789D-16	5.061536E-16	6.234967D-16	8.014400D-16
L	3.00 EV			
0	2.607811D-01			
1	0.0			
2	1.862950D-01			
3	0.0			
4	2.960577D-01			
5	0.0			
6	3.485695D-05			
7	0.0			
8	9.080671D-09			
9	0.0			
10	9.914131D-13			
11	0.0			
12	1.002902D-15			

A-L COEFFICIENTS FOR 0 TO 7 TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	2.044466D-01	1.768637D-01	1.806260D-01	1.573325D-01	1.025781D-01
1	0.0	0.0	0.0	0.0	0.0
2	1.460526D-01	1.263494D-01	1.290388D-01	1.123994D-01	7.328345D-02
3	0.0	0.0	0.0	0.0	0.0
4	2.320488D-01	2.006911D-01	2.049052D-01	1.784350D-01	1.163069D-01
5	0.0	0.0	0.0	0.0	0.0
6	2.960545D-05	2.785658D-05	3.00119D-05	2.914903D-05	2.044178D-05
7	0.0	0.0	0.0	0.0	0.0
8	-1.547942D-08	-3.129759D-08	-4.047446D-08	-2.684476D-08	-2.967837D-10
9	0.0	0.0	0.0	0.0	0.0
10	2.129737D-13	-6.217560D-13	-1.661784D-12	-2.059982D-12	-1.239947D-12
11	0.0	0.0	0.0	0.0	0.0
12	1.177908D-15	1.658264E-15	2.238813D-15	2.817582D-15	3.587588D-15
L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	6.558714D-02	4.697117D-02	3.514526D-02	2.362774D-02	1.356783D-02
1	0.0	0.0	0.0	0.0	0.0
2	4.685720D-02	3.355799D-02	2.510952D-02	1.688111D-02	9.693866D-03
3	0.0	0.0	0.0	0.0	0.0
4	7.434476D-02	5.322780D-02	3.981491D-02	2.675871D-02	1.536053D-02
5	0.0	0.0	0.0	0.0	0.0
6	1.409556D-05	1.088215D-05	8.753693D-06	6.319800D-06	3.897980D-06
7	0.0	0.0	0.0	0.0	0.0
8	1.703758D-08	2.699406D-08	3.051100D-08	2.427569D-08	1.247363D-08
9	0.0	0.0	0.0	0.0	0.0
10	-2.200285D-13	7.360588D-13	1.573678D-12	1.889369D-12	1.541547D-12
11	0.0	0.0	0.0	0.0	0.0
12	4.425910D-15	5.234511D-15	6.269599D-15	7.352395D-15	8.372417D-15
L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	7.198088D-04	1.408162D-05	4.147496D-06	1.055049D-06	1.498291D-07
1	0.0	0.0	0.0	0.0	0.0
2	5.143338D-04	1.006142D-05	2.963745D-06	7.544732D-07	1.074243D-07
3	0.0	0.0	0.0	0.0	0.0
4	8.131312D-04	1.585947D-05	4.649084D-06	1.172953D-06	1.644009D-07
5	0.0	0.0	0.0	0.0	0.0
6	2.899271D-07	5.838912D-09	2.469105D-09	1.424068D-09	5.600045D-10
7	0.0	0.0	0.0	0.0	0.0
8	-6.336217D-09	-9.853765D-10	-5.632936D-10	-1.016318D-10	6.886082D-11
9	0.0	0.0	0.0	0.0	0.0
10	-4.169887D-13	-7.548977D-14	-4.766396D-14	9.616245D-15	1.515000D-13
11	0.0	0.0	0.0	0.0	0.0
12	1.490129D-14	2.199089D-14	2.811443D-14	3.551621D-14	4.280858D-14
L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	1.214961D-08	8.290141D-10	5.075983D-11	1.086890D-10	1.204023D-10
1	0.0	0.0	0.0	0.0	0.0
2	8.795354D-09	6.244315C-10	4.346290D-11	7.347780D-11	8.089733D-11
3	0.0	0.0	0.0	0.0	0.0
4	1.297859D-08	8.046789C-10	2.670845D-11	1.216310D-10	1.391513D-10
5	0.0	0.0	0.0	0.0	0.0
6	1.477027D-10	3.899855D-11	8.415124D-12	-5.292055D-12	-6.578002D-12
7	0.0	0.0	0.0	0.0	0.0
8	3.652432D-11	1.046803C-11	4.857830D-13	-4.572022D-12	-4.910500D-12
9	0.0	0.0	0.0	0.0	0.0
10	2.286119D-13	2.620811C-13	2.880659D-13	3.364124D-13	3.787730D-13
11	0.0	0.0	0.0	0.0	0.0
12	4.979208D-14	5.638004C-14	6.253121D-14	7.358452D-14	8.303321D-14

A-L COEFFICIENTS FOR 0 TO 8 TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	7.041596D-04	1.740304D-03	3.164418D-03	4.319805D-03	5.468999D-03
1	0.0	0.0	0.0	0.0	0.0
2	5.029968D-04	1.243132D-03	2.260423D-03	3.085783D-03	3.906722D-03
3	0.0	0.0	0.0	0.0	0.0
4	8.006352D-04	1.978843D-03	3.597651D-03	4.910053D-03	6.215719D-03
5	0.0	0.0	0.0	0.0	0.0
6	4.510379D-08	9.636361C-08	1.882308D-07	3.020286D-07	4.000070D-07
7	0.0	0.0	0.0	0.0	0.0
8	-8.451244D-10	-9.037955D-10	2.256602D-10	2.920952D-09	6.779277D-09
9	0.0	0.0	0.0	0.0	0.0
10	-5.719206D-14	-5.508783C-14	-3.272976D-14	-1.577769D-14	2.932425D-14
11	0.0	0.0	0.0	0.0	0.0
12	3.195329D-16	4.289580C-16	7.202877D-16	1.494949D-15	2.776167D-15
L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	7.311924D-03	1.056670C-02	1.578285D-02	2.192521D-02	2.557721D-02
1	0.0	0.0	0.0	0.0	0.0
2	5.223238D-03	7.548341C-03	1.127456D-02	1.566239D-02	1.827117D-02
3	0.0	0.0	0.0	0.0	0.0
4	8.309114D-03	1.200566D-02	1.792945D-02	2.490496D-02	2.905157D-02
5	0.0	0.0	0.0	0.0	0.0
6	5.873862D-07	9.506700C-07	1.540819D-06	2.218436D-06	2.616052D-06
7	0.0	0.0	0.0	0.0	0.0
8	1.182608D-08	1.855926C-08	2.518989D-08	2.402640D-08	7.789551D-09
9	0.0	0.0	0.0	0.0	0.0
10	1.338787D-13	3.551261C-13	7.273330D-13	1.109195D-12	1.193717D-12
11	0.0	0.0	0.0	0.0	0.0
12	4.600985D-15	7.361365C-15	1.154792D-14	1.737027D-14	2.489312D-14
L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	2.466625D-02	2.592458C-02	3.194488D-02	3.344739D-02	2.619203D-02
1	0.0	0.0	0.0	0.0	0.0
2	1.762037D-02	1.851937C-02	2.282024D-02	2.389410D-02	1.871164D-02
3	0.0	0.0	0.0	0.0	0.0
4	2.801146D-02	2.943199D-02	3.625761D-02	3.795166D-02	2.970856D-02
5	0.0	0.0	0.0	0.0	0.0
6	2.661340D-06	3.095330C-06	4.182010D-06	4.986286D-06	4.590969D-06
7	0.0	0.0	0.0	0.0	0.0
8	-4.229714D-08	-8.977378C-08	-1.242259D-07	-8.039764D-08	2.437794D-08
9	0.0	0.0	0.0	0.0	0.0
10	4.086129D-13	-1.410223D-12	-4.248416D-12	-5.778062D-12	-3.216035D-12
11	0.0	0.0	0.0	0.0	0.0
12	4.645784D-14	7.909714C-14	1.245817D-13	1.839493D-13	2.605627D-13
L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	2.014218D-02	1.740739C-02	1.579896D-02	1.297503D-02	9.185046D-03
1	0.0	0.0	0.0	0.0	0.0
2	1.439011D-02	1.243672C-02	1.128788D-02	9.270410D-03	6.562529D-03
3	0.0	0.0	0.0	0.0	0.0
4	2.283880D-02	1.973145D-02	1.790204D-02	1.469727D-02	1.040097D-02
5	0.0	0.0	0.0	0.0	0.0
6	4.075220D-06	3.980661C-06	4.011575D-06	3.533904D-06	2.578258D-06
7	0.0	0.0	0.0	0.0	0.0
8	1.090653D-07	1.707536C-07	1.997393D-07	1.611770D-07	7.350541D-08
9	0.0	0.0	0.0	0.0	0.0
10	1.275375D-12	6.481616C-12	1.234829D-11	1.605946D-11	1.523074D-11
11	0.0	0.0	0.0	0.0	0.0
12	3.540438D-13	4.661930C-13	5.976915D-13	7.469439D-13	9.154336D-13

A-L COEFFICIENTS FOR 0 TO 8 TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	1.750610D-03	1.942172D-04	1.928757D-05	1.478402D-06	1.100885D-07
1	0.0	0.0	0.0	0.0	0.0
2	1.250582D-03	1.388153D-04	1.383179D-05	1.066138D-06	7.873284D-08
3	0.0	0.0	0.0	0.0	0.0
4	1.978738D-03	2.1883E2D-04	2.161005D-05	1.645499D-06	1.225464D-07
5	0.0	0.0	0.0	0.0	0.0
6	4.064648D-07	1.280398D-C7	6.096125D-08	1.060036D-08	-2.872497D-10
7	0.0	0.0	0.0	0.0	0.0
8	-1.218781D-07	7.278943D-09	2.052736D-08	4.073821D-09	-2.049830D-10
9	0.0	0.0	0.0	0.0	0.0
10	-2.048555D-12	9.421813D-12	2.529781D-11	3.263210D-11	3.925316D-11
11	0.0	0.0	0.0	0.0	0.0
12	2.022706D-12	3.496247D-12	5.222840D-12	7.084996D-12	9.006425D-12

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	8.084491D-09	1.556212D-09	9.040983D-10	7.473019D-10	7.097827D-10
1	0.0	0.0	0.0	0.0	0.0
2	5.636678D-09	1.301464D-09	9.589599D-10	8.998353D-10	8.726148D-10
3	0.0	0.0	0.0	0.0	0.0
4	8.851755D-09	1.306397D-09	4.745780D-10	2.435396D-10	1.927192D-10
5	0.0	0.0	0.0	0.0	0.0
6	-5.423344D-10	-1.875193D-10	-5.367817D-11	6.179854D-12	1.050604D-11
7	0.0	0.0	0.0	0.0	0.0
8	-2.195407D-10	-3.385446D-11	3.974087D-11	8.600981D-11	1.038069D-10
9	0.0	0.0	0.0	0.0	0.0
10	4.719056D-11	5.560902D-11	6.386898D-11	7.947092D-11	9.362047D-11
11	0.0	0.0	0.0	0.0	0.0
12	1.093150D-11	1.282090D-11	1.465123D-11	1.808941D-11	2.121396D-11



Table 3

**Angular Distribution Coefficients for Differential Simultaneous
Rotation-Vibration Cross Sections**

(Units Bohr radii squared (a_0^2) in conjunction with equation 8.

The total cross section in a_0^2 may be derived from equation 9.)

A-L COEFFICIENTS FOR (0,0 TO 0,0) TRANSITION

L	0.10 EV	0.20 EV	0.30 EV	0.40 EV	0.50 EV
0	8.697456D 00	1.073525C 01	1.192404D 01	1.269454D 01	1.321919D 01
1	-4.598058D 00	-5.542261D 00	-5.501881D 00	-5.022042D 00	-4.320658D 00
2	-1.117649D 00	-1.959717C 00	-2.714038D 00	-3.426957D 00	-4.137467D 00
3	-4.133807D-01	-5.798952D-01	-7.722567D-01	-9.671190D-01	-1.123984D 00
4	-2.305446D-01	-3.146909D-01	-3.793905D-01	-4.376498D-01	-4.704787D-01
5	-1.818684D-01	-2.345696C-01	-2.722647D-01	-2.948486D-01	-3.210823D-01
6	6.212334D-02	5.154745C-02	4.442282D-02	3.735781D-02	3.057162D-02
7	1.048943D-01	1.024075C-01	1.029756D-01	1.049098D-01	1.077172D-01
8	4.789533D-02	4.644439D-02	5.087614D-02	5.722565D-02	6.414260D-02
9	9.939471D-02	9.242841D-02	8.891300D-02	8.682711D-02	8.550198D-02
10	4.609709D-02	4.066116C-02	4.020844D-02	4.138128D-02	4.328483D-02
11	8.436405D-02	7.875257C-02	7.507854D-02	7.212773D-02	6.961240D-02
12	4.310630D-02	3.848724C-02	3.602542D-02	3.441030D-02	3.329629D-02
13	-2.138923D-02	-2.439624C-02	-2.415236D-02	-2.274890D-02	-2.079677D-02
14	-7.07779720D-03	-9.608764D-03	-1.075633D-02	-1.124133D-02	-1.129136D-02
15	-2.498255D-03	-3.857722D-03	-4.534991D-03	-4.853093D-03	-4.895582D-03
16	-5.509610D-04	-1.451132C-03	-1.933233D-03	-2.199918D-03	-2.326622D-03
17	3.811631D-04	-2.202131C-04	-5.699315D-04	-7.871864D-04	-9.271165D-04
18	8.084880D-04	3.9367E3D-04	1.373017D-04	-3.859885D-05	-1.623801D-04
19	7.185853D-04	4.535123D-04	2.836736D-04	1.630520D-04	7.399376D-05
20	5.565359D-04	3.889707C-04	2.790490D-04	1.989128D-04	1.378189D-04
21	3.992635D-04	2.942449D-04	2.241728D-04	1.721447D-04	1.316514D-04
22	2.351585D-04	1.789462C-04	1.409631D-04	1.124022D-04	8.986425D-05
23	1.293437D-04	1.008563C-04	8.139429D-05	6.660347D-05	5.479872D-05
24	3.772036D-05	2.962251C-05	2.407088D-05	1.983718D-05	1.644592D-05
L	0.60 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	1.359702D 01	1.385645C 01	1.404259D 01	1.418015D 01	1.428659D 01
1	-3.492333D 00	-2.625282C 00	-1.734747D 00	-8.654721D-01	-3.476629D-02
2	-4.810598D 00	-5.439781C 00	-6.039233D 00	-6.611884D 00	-7.165212D 00
3	-1.310446D 00	-1.512219C 00	-1.725433D 00	-1.947483D 00	-2.180318D 00
4	-4.988233D-01	-5.154315C-01	-5.150050D-01	-4.904068D-01	-4.342146D-01
5	-3.367263D-01	-3.411015C-01	-3.372722D-01	-3.230622D-01	-2.965245D-01
6	2.781621D-02	3.231822C-02	3.780900D-02	4.734569D-02	6.429908D-02
7	1.132399D-01	1.213563C-01	1.322101D-01	1.462931D-01	1.641620D-01
8	7.236380D-02	8.158816C-02	9.217195D-02	1.042368D-01	1.177544D-01
9	8.530555D-02	8.606674D-02	8.794681D-02	9.095894D-02	9.511278D-02
10	4.572572D-02	4.847130C-02	5.161519D-02	5.511465D-02	5.896208D-02
11	6.751545D-02	6.567406C-02	6.427518D-02	6.325629D-02	6.259920D-02
12	3.250511D-02	3.189381C-02	3.157202D-02	3.146999D-02	3.156965D-02
13	-1.862192D-02	-1.636023D-02	-1.401062D-02	-1.164236D-02	-9.281835D-03
14	-1.111461D-02	-1.075015C-02	-1.021380D-02	-9.536838D-03	-8.742587D-03
15	-4.820074D-03	-4.642324C-03	-4.370780D-03	-4.020827D-03	-3.603597D-03
16	-2.367960D-03	-2.340830C-03	-2.258683D-03	-2.130224D-03	-1.961563D-03
17	-1.008129D-03	-1.042737C-03	-1.044862D-03	-1.019002D-03	-9.679407D-04
18	-2.489719D-04	-3.063990C-04	-3.433322D-04	-3.626366D-04	-3.660806D-04
19	7.228444D-06	-4.255819C-05	-7.896866D-05	-1.044122D-04	-1.206723D-04
20	9.025410D-05	5.297095C-05	2.377082D-05	1.203197D-06	-1.581430D-05
21	9.935231D-05	7.329607C-05	5.211907D-05	3.495878D-05	2.115891D-05
22	7.160583D-05	5.661118C-05	4.416283D-05	3.381333D-05	2.521831D-05
23	4.511563D-05	3.704063C-05	3.023901D-05	2.447825D-05	1.958722D-05
24	1.365314D-05	1.131397D-05	9.333976D-06	7.647552D-06	6.206910D-06

A-L COEFFICIENTS FOR (0,0 TO 0,0) TRANSITION

L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	1.437657D 01	1.446284D 01	1.456120D 01	1.468951D 01	1.487905D 01
1	7.459876D-01	1.468074D 00	2.124864D 00	2.708579D 00	3.211203D 00
2	-7.710851D 00	-8.251474D 00	-8.802891D 00	-9.357117D 00	-9.907294D 00
3	-2.426518D 00	-2.690776D 00	-2.978999D 00	-3.300896D 00	-3.670961D 00
4	-3.346349D-01	-1.763315D-01	6.909187D-02	4.394219D-01	1.012234D 00
5	-2.542737D-01	-1.928878C-01	-1.053926D-01	1.571500D-02	1.854256D-01
6	8.966464D-02	1.249214D-01	1.740325D-01	2.410767D-01	3.340576D-01
7	1.670686D-01	2.161449C-01	2.537042D-01	3.022557D-01	3.666586D-01
8	1.334169D-01	1.518382C-01	1.741018D-01	2.014280D-01	2.361594D-01
9	1.007000D-01	1.080032D-01	1.175218D-01	1.298568D-01	1.461423D-01
10	6.329624D-02	6.826533D-02	7.411037D-02	8.113550D-02	8.988210D-02
11	6.236030D-02	6.261526D-02	6.346294D-02	6.505384D-02	6.763629D-02
12	3.188501D-02	3.244524D-02	3.328441D-02	3.447020D-02	3.610430D-02
13	-6.940849D-03	-4.612691D-03	-2.301170D-03	1.694380D-05	2.355312D-03
14	-7.849933D-03	-6.866091C-03	-5.806729D-03	-4.671633D-03	-3.470036D-03
15	-3.129879D-03	-2.606673D-03	-2.040234D-03	-1.435393D-03	-7.961347D-04
16	-1.759390D-03	-1.527929C-03	-1.270905D-03	-9.911945D-04	-6.912241D-04
17	-8.961367D-04	-8.065590D-04	-7.013138D-04	-5.821597D-04	-4.505983D-04
18	-3.564687D-04	-3.3566698C-04	-3.050094D-04	-2.655870D-04	-2.183598D-04
19	-1.290929D-04	-1.307188D-C4	-1.263812D-C4	-1.167466D-04	-1.023878D-04
20	-2.809758D-05	-3.627712D-05	-4.085491D-05	-4.223793D-05	-4.076254D-05
21	1.022433D-05	1.773373C-06	-4.497644D-06	-8.835393D-06	-1.144291D-05
22	1.811795D-05	1.231361C-05	7.647098D-06	3.989458D-06	1.235713D-06
23	1.543708D-05	1.192942D-C5	8.985724D-06	6.542074D-06	4.546620D-06
24	4.976034D-06	3.926866C-06	3.037107D-06	2.288716D-06	1.666737D-06

L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	1.518651D 01	1.573813C 01	1.684591D 01	1.924195D 01	1.862162D 01
1	3.616846D 00	3.961918C 00	4.033848D C0	4.174965D 00	6.010190D 00
2	-1.039013D 01	-1.055157C 01	-9.259104D 00	-2.547834D-01	2.240843D 01
3	-4.113179D 00	-4.667724D 00	-5.384793D C0	-6.026381D 00	-4.047336D 00
4	1.935468D 00	3.536295C 00	6.651263D 00	1.309943D 01	1.091329D 01
5	4.279870D-01	7.865131C-01	1.330208D C0	1.910078D 00	-9.268214D-02
6	4.658849D-01	6.594708D-01	9.512765D-01	1.258886D 00	1.827037D-01
7	4.548280D-01	5.807459C-01	7.665885D-01	9.617633D-01	3.122328D-01
8	2.020795D-01	3.458601D-01	4.381435D-01	5.356827D-01	2.363384D-01
9	1.682164D-01	1.993591C-01	2.449010D-01	2.946079D-01	1.562123D-01
10	1.012296D-01	1.167377C-01	1.389595D-C1	1.634637D-01	1.015051D-01
11	7.162407D-02	7.776244D-02	8.732271D-02	9.882140D-02	7.272358D-02
12	3.836369D-02	4.157157C-02	4.629979D-02	5.218581D-02	4.345012D-02
13	4.751747D-03	7.269894D-03	1.006754D-C2	1.361758D-02	1.747657D-02
14	-2.205148D-03	-8.738608D-C4	5.638782D-04	2.489738D-03	6.443569D-03
15	-1.257632D-04	5.729084C-04	1.297499D-C3	2.046000D-03	2.815857D-03
16	-3.729693D-04	-3.812125D-05	3.118656D-C4	6.757741D-04	1.052707D-03
17	-3.078517D-04	-1.549465D-04	7.232938D-C6	1.779284D-04	3.565218D-04
18	-1.640905D-04	-1.034252D-C4	-3.692160D-05	3.494291D-05	1.117713D-04
19	-8.376301D-05	-6.126577D-05	-3.523260D-05	-5.953624D-06	2.632825D-05
20	-3.670989D-05	-3.031785C-05	-2.178984D-05	-1.130123D-05	9.995903D-07
21	-1.249044D-05	-1.212199D-05	-1.046072D-05	-7.612800D-06	-3.668973D-06
22	-7.030210D-07	-1.901940C-06	-2.425344D-06	-2.328700D-06	-1.660206D-06
23	2.955278D-06	1.730772D-06	8.412251D-C7	2.591206D-07	-3.962926D-08
24	1.158861D-06	7.544146D-C7	4.444450D-07	2.211782D-07	7.785298D-08

A-L COEFFICIENTS FOR (0,0 TO 0,0) TRANSITION

L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	1.585169D 01	1.509516C 01	1.582067D 01	1.767931D 01	2.051500D 01
1	6.505229D 00	6.245040C 00	5.842622D 00	5.573018D 00	5.940928D 00
2	1.577055D 01	7.446068D 00	4.271845D 00	7.670293D 00	2.086483D 01
3	-3.666318D 00	-4.413947D 00	-5.365936D C0	-6.107388D 00	-5.877383D 00
4	3.604794D 00	1.870455C 00	4.051818D 00	9.128323D 00	1.650981D 01
5	-7.974322D-01	-3.461027D-01	4.132364D-01	1.121495D 00	1.221609D 00
6	-1.885211D-01	5.731641C-02	4.648335D-01	8.417252D-01	8.892306D-01
7	9.043744D-02	2.454465D-01	4.989003D-01	7.330975D-01	7.644518D-01
8	1.340337D-01	2.096463D-01	3.323405D-01	4.463413D-01	4.635440D-01
9	1.079159D-01	1.453223D-01	2.064031D-01	2.640701D-01	2.742939D-01
10	7.957075D-02	9.736321C-02	1.264169D-01	1.541019D-01	1.595019D-01
11	6.271780D-02	7.074634D-02	8.442943D-02	9.792999D-02	1.009357D-01
12	3.982754D-02	4.355032D-02	4.981700D-02	5.619932D-02	5.812099D-02
13	1.641386D-02	1.985091D-02	2.194394D-02	2.441905D-02	2.618561D-02
14	7.633644D-03	8.332875D-03	9.223271D-03	1.039258D-02	1.158799D-02
15	3.209491D-03	3.607597D-03	4.010703D-03	4.418500D-03	4.830850D-03
16	1.245477D-03	1.441290D-03	1.639955D-03	1.841304D-03	2.045267D-03
17	4.485717D-04	5.423771D-04	6.378979D-04	7.350503D-04	8.337904D-04
18	1.519439D-04	1.931987D-04	2.355258D-04	2.788797D-04	3.232320D-04
19	4.352411D-05	6.138810C-05	7.990109D-C5	9.903571D-05	1.187742D-04
20	7.786891D-06	1.497776D-05	2.256004D-05	3.051794D-05	3.884034D-05
21	-1.311821D-06	1.289538C-06	4.127357D-06	7.192533D-06	1.047807D-05
22	-1.124809D-06	-4.617703C-07	3.245315D-07	1.229767D-06	2.250057D-06
23	-8.929348D-08	-7.566647C-08	-9.881366D-10	1.326787D-07	3.233633D-07
24	3.429246D-08	8.553084C-09	2.672785D-12	8.045303D-09	3.212017D-08

L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	2.206368D 01	1.951618D 01	1.639596D 01	1.487530D 01	1.470626D 01
1	7.669749D 00	9.407949C 00	9.641056D 00	9.160481D 00	8.604163D 00
2	3.982878D 01	4.200888C 01	3.040477D 01	2.043538D 01	1.593504D 01
3	-3.579584D 00	-1.244802D 00	-1.166398D 00	-2.157371D 00	-3.255776D 00
4	2.002513D 01	1.286548C 01	4.766915D 00	1.097462D 00	9.816295D-01
5	-2.9196669D-01	-2.250092D 00	-2.660119D 00	-2.143093D 00	-1.391889D 00
6	7.359773D-02	-9.697135C-01	-1.180155D C0	-8.979403D-01	-4.943215D-01
7	2.658435D-01	-3.707130C-01	-4.949421D-01	-3.167782D-01	-6.459861D-02
8	2.262780D-01	-7.809193C-02	-1.363881D-01	-4.884335D-02	7.478827D-02
9	1.570201D-01	4.442025D-03	-2.509384D-02	1.962632D-02	8.341438D-02
10	1.0422211D-01	3.160865D-02	1.745644D-02	3.893941D-02	6.976497D-02
11	7.386760D-02	3.730854C-02	2.961508D-02	4.015291D-02	5.583350D-02
12	4.662143D-02	3.050749C-02	2.721675D-02	3.228593D-02	3.985393D-02
13	2.459163D-02	2.111581C-02	2.070490D-02	2.278407D-02	2.585576D-02
14	1.194008D-02	1.148246C-02	1.174983D-02	1.285081D-02	1.438881D-02
15	5.247539D-03	5.668240D-03	6.092279D-03	6.521278D-03	6.954389D-03
16	2.251745D-03	2.460573D-03	2.671387D-03	2.884891D-03	3.100686D-03
17	9.340643D-04	1.035815D-03	1.138897D-03	1.243472D-03	1.349407D-03
18	3.685474D-04	4.147946D-04	4.619115D-04	5.099340D-04	5.588067D-04
19	1.390950D-04	1.599810D-04	1.814155D-04	2.033807D-04	2.258570D-04
20	4.751445D-05	5.652981C-05	6.587620D-05	7.554305D-05	8.551887D-05
21	1.397635D-05	1.768092C-05	2.158553D-05	2.568385D-05	2.996920D-05
22	3.381540D-06	4.620758D-06	5.964427D-06	7.409320D-06	8.952131D-06
23	5.691868D-07	8.684111C-07	1.219401D-06	1.620570D-06	2.070323D-06
24	7.169394D-08	1.262636C-07	1.953535D-07	2.785133D-07	3.753133D-07

A-L COEFFICIENTS FOR (C,0 TO 0,0) TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	1.570410D 01	1.746960E 01	1.816420D 01	1.702329D 01	1.559406D 01
1	8.372932D 00	9.087787E 00	1.068597D 01	1.167662D 01	1.174440D 01
2	1.847116D 01	2.891498E 01	3.816076D 01	3.623979D 01	2.930183D 01
3	-3.857347D 00	-3.023915D 00	-8.422820D-01	4.396748D-01	3.387342D-01
4	3.804918D 00	8.316436D 00	9.717466D 00	6.503264D 00	2.839137D 00
5	-8.130002D-01	-1.064823E 00	-2.370025D 00	-3.384137D 00	-3.547587D 00
6	-1.866596D-01	-3.262347D-01	-1.024740D 00	-1.560520D 00	-1.640484D 00
7	1.275764D-01	4.331336E-02	-3.851194D-01	-7.116837D-01	-7.565728D-01
8	1.693880D-01	1.295357D-C1	-7.838941D-C2	-2.368614D-01	-2.576970D-01
9	1.328596D-01	1.129189C-01	5.026706D-03	-7.781357D-02	-8.876952D-02
10	9.381301D-02	8.424548C-02	3.172377D-C2	-8.826166D-03	-1.434106D-02
11	6.829516D-02	6.314967D-02	3.489109D-02	1.264427D-02	9.166239D-03
12	4.603802D-02	4.396913C-02	3.082791D-02	2.039413D-02	1.890830D-02
13	2.866824D-02	2.867081D-02	2.447675D-02	2.098590D-02	2.078455D-02
14	1.591273D-02	1.638057D-C2	1.511803D-02	1.405635D-02	1.433642D-02
15	7.390327D-03	7.830906D-03	8.274862D-03	8.722171D-03	9.173153D-03
16	3.318150D-03	3.538102D-03	3.760039D-03	3.983876D-03	4.209653D-03
17	1.456472D-03	1.564939D-03	1.674655D-03	1.785564D-03	1.897635D-03
18	6.084340D-04	6.589066D-04	7.101605D-04	7.621656D-04	8.149012D-04
19	2.488296D-04	2.722841D-C4	2.962076D-C4	3.205858D-04	3.454061D-04
20	9.579462D-05	1.063615D-04	1.172118D-C4	1.283368D-04	1.397289D-04
21	3.443610D-05	3.907922C-05	4.389364D-C5	4.887439D-05	5.401684D-05
22	1.058397D-05	1.232005D-05	1.413976D-C5	1.604652D-05	1.803792D-05
23	2.567218D-06	3.109860D-06	3.696914D-06	4.327143D-06	4.999346D-06
24	4.853517D-07	6.082379C-07	7.435956D-C7	8.910804D-07	1.050354D-05

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	1.462863D 01	1.417889D 01	1.422557D 01	1.463674D 01	1.494176D 01
1	1.143280D 01	1.108433D 01	1.094811D C1	1.128013D 01	1.198024D 01
2	2.328541D 01	1.986207D 01	1.975840D 01	2.277692D 01	2.579786D 01
3	-3.275979D-01	-1.043521D 00	-1.433227D 00	-1.109553D 00	-2.206495D-01
4	5.189722D-01	-4.318277D-01	-1.407191D-01	9.614782D-01	1.655769D 00
5	-3.265643D 00	-2.852429D 00	-2.536178D 00	-2.586999D 00	-3.036546D 00
6	-1.484535D 00	-1.260918D 00	-1.091464D 00	-1.119202D 00	-1.358038D 00
7	-6.561076D-01	-5.142785C-01	-4.064594D-01	-4.210544D-01	-5.651490D-01
8	-2.072732D-01	-1.364208D-01	-8.224990D-02	-8.853828D-02	-1.594325D-01
9	-6.205256D-02	-2.422666D-02	4.999001D-03	2.022515D-03	-3.570697D-02
10	-1.369625D-03	1.713207D-02	3.146114D-02	2.987582D-02	1.106560D-02
11	1.582365D-02	2.566873D-02	3.335219D-02	3.224511D-02	2.142957D-02
12	2.234217D-02	2.737732C-02	3.140434D-02	3.113222D-02	2.603458D-02
13	2.253834D-02	2.501588C-02	2.714944D-02	2.749528D-02	2.570709D-02
14	1.546471D-02	1.693803D-02	1.828875D-02	1.885512D-02	1.844995D-02
15	9.627418D-03	1.008508C-02	1.054600D-C2	1.101168D-02	1.147876D-02
16	4.437325D-03	4.666853D-C3	4.898171D-03	5.131978D-03	5.366652D-03
17	2.010832D-03	2.125133D-03	2.240506D-03	2.357311D-03	2.474738D-03
18	8.683457D-04	9.224843D-04	9.772972D-04	1.032954D-03	1.089060D-03
19	3.706567D-04	3.963260C-04	4.224035D-04	4.489848D-04	4.758469D-04
20	1.513810D-04	1.632862D-04	1.754379D-C4	1.878814D-04	2.005073D-04
21	5.931664D-05	6.476960D-05	7.037176D-05	7.614169D-05	8.203122D-05
22	2.011167D-05	2.226557C-05	2.449755D-05	2.681553D-05	2.919801D-05
23	5.712383D-06	6.465173D-06	7.256678D-06	8.085873D-06	8.951800D-06
24	1.221100D-06	1.403013D-06	1.595806D-06	1.799187D-06	2.012885D-06

A-L COEFFICIENTS FOR (0,0 TO 0,0) TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	1.444448D 01	1.374285C 01	1.339059D 01	1.332042D 01	1.319580D 01
1	1.274373D 01	1.263660C 01	1.248280D 01	1.268458D 01	1.297150D 01
2	2.370070D 01	1.894737C 01	1.663979D 01	1.671502D 01	1.621608D 01
3	6.264271D-01	1.881223C-01	-2.972649D-01	-2.221751D-01	7.023205D-03
4	2.885069D-01	-1.349348C 00	-2.039445D 00	-2.098187D 00	-2.327310D 00
5	-3.681115D 00	-3.577984C 00	-3.323460D 00	-3.314105D 00	-3.454660D 00
6	-1.692549D 00	-1.628277D 00	-1.485985D 00	-1.475525D 00	-1.542970D 00
7	-7.661237D-01	-7.188214C-01	-6.238753D-01	-6.112102D-01	-6.465968D-01
8	-2.566042D-01	-2.312331D-01	-1.818964D-01	-1.735329D-01	-1.893135D-01
9	-8.759865D-02	-7.316473C-02	-4.530299D-02	-3.969259D-02	-4.733631D-02
10	-1.502050D-02	-8.140473C-03	5.523454D-03	8.076623D-03	3.957814D-03
11	6.069364D-03	9.468398D-C3	1.696169D-02	1.813937D-02	1.545572D-02
12	1.885526D-02	2.103455D-02	2.533026D-02	2.645921D-02	2.562159D-02
13	2.324662D-02	2.491357D-02	2.760642D-02	2.881861D-02	2.904590D-02
14	1.811561D-02	1.970057D-02	2.180538D-02	2.323127D-02	2.419397D-02
15	1.242209D-02	1.337544C-02	1.434047D-02	1.531702D-02	1.630326D-02
16	5.840967D-03	6.320828C-03	6.806888D-03	7.299025D-03	7.796281D-03
17	2.712557D-03	2.953731C-03	3.198568D-03	3.447126D-03	3.698769D-03
18	1.203132D-03	1.319576D-03	1.438285D-C3	1.559159D-03	1.682098D-03
19	5.306943D-04	5.869803C-04	6.446377D-04	7.036047D-04	7.638240D-04
20	2.264377D-04	2.532370C-04	2.808646D-04	3.092832D-04	3.384583D-04
21	9.422098D-05	1.069366D-04	1.201534D-04	1.338488D-04	1.480021D-04
22	3.417777D-05	3.943267D-05	4.494983D-05	5.071739D-05	5.672445D-05
23	1.079027D-05	1.276523C-05	1.487030D-05	1.709957D-05	1.944763D-05
24	2.470238D-06	2.965950C-06	3.498223D-06	4.065393D-06	4.665944D-06
L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	1.298225D 01	1.278159C 01	1.262188D 01	1.249799D 01	1.238856D 01
1	1.305739D 01	1.304283C 01	1.302035D 01	1.303296D 01	1.306513D 01
2	1.482316D 01	1.353113D 01	1.264277D 01	1.211429D 01	1.171270D 01
3	-4.438254D-02	-2.273331D-01	-4.036417D-01	-5.088631D-01	-5.679211D-01
4	-2.754819D 00	-3.121372D 00	-3.377205D 00	-3.548594D 00	-3.691596D 00
5	-3.478890D 00	-3.418295C 00	-3.339071D 00	-3.281563D 00	-3.247428D 00
6	-1.547443D 00	-1.506875C 00	-1.456750D 00	-1.418378D 00	-1.391988D 00
7	-6.428819D-01	-6.111302D-01	-5.734943D-01	-5.434523D-01	-5.207900D-01
8	-1.851539D-01	-1.669023D-01	-1.454316D-C1	-1.277297D-01	-1.138288D-01
9	-4.383592D-02	-3.231410C-02	-1.882348D-02	-7.308530D-03	2.196008D-03
10	5.475733D-03	1.107640C-02	1.772011D-02	2.339591D-02	2.807240D-02
11	1.614281D-02	1.934047C-02	2.324933D-02	2.665637D-02	2.952650D-02
12	2.651849D-02	2.872701C-02	3.132669D-02	3.368565D-02	3.577970D-02
13	3.009460D-02	3.179201C-02	3.368861D-02	3.545874D-02	3.708482D-02
14	2.556792D-02	2.727464C-02	2.909588D-02	3.086773D-02	3.257807D-02
15	1.730019D-02	1.830640D-02	1.932350D-02	2.034876D-02	2.138273D-02
16	8.299122D-03	8.806746C-03	9.319966D-03	9.837342D-03	1.035905D-02
17	3.953965D-03	4.211848C-03	4.473008D-03	4.737002D-03	5.003302D-03
18	1.807025D-03	1.933851C-03	2.062501D-03	2.192910D-03	2.325028D-03
19	8.252434D-04	8.878122C-04	9.514850D-04	1.016219D-03	1.081971D-03
20	3.683585D-04	3.989527D-04	4.302134D-04	4.621150D-04	4.946328D-04
21	1.625939D-04	1.776056D-04	1.930207D-04	2.088234D-04	2.249988D-04
22	6.296098D-05	6.941718C-05	7.608435D-05	8.295430D-05	9.001924D-05
23	2.190949D-05	2.448029D-05	2.715571D-05	2.993170D-05	3.280437D-05
24	5.298494D-06	5.961644D-06	6.654198D-06	7.375025D-06	8.123029D-06

A-L COEFFICIENTS FOR (0,0 TO 0,0) TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	1.191272D 01	1.155531C 01	1.125774D 01	1.100210D 01	1.077824D 01
1	1.307581D 01	1.303567D 01	1.297726D 01	1.291395D 01	1.286099D 01
2	1.029915D 01	1.007248C 01	1.035202D 01	1.087321D 01	1.150760D 01
3	-8.713156D-01	-9.673327D-01	-8.881067D-01	-6.663935D-01	-3.256245D-01
4	-4.224231D 00	-4.473204C 00	-4.585312D 00	-4.606078D 00	-4.555432D 00
5	-3.053584D 00	-2.870570C 00	-2.697795D 00	-2.521455D 00	-2.334464D 00
6	-1.244854D 00	-1.098325D 00	-9.514356D-01	-7.966356D-01	-6.302246D-01
7	-3.982324D-01	-2.771427C-01	-1.571314D-01	-3.360622D-02	9.575274D-02
8	-3.757348D-02	3.967839C-02	1.179132D-01	1.995024D-01	2.856197D-01
9	5.518620D-02	1.106494C-01	1.678852D-01	2.277000D-01	2.905378D-01
10	5.477831D-02	8.366834C-02	1.143812D-01	1.473626D-01	1.828392D-01
11	4.670531D-02	6.623631C-02	8.754690D-02	1.107165D-01	1.357023D-01
12	4.794753D-02	6.166554D-02	7.659213D-02	9.274942D-02	1.101090D-01
13	4.599321D-02	5.555460D-02	6.563053D-02	7.628023D-02	8.754196D-02
14	4.164528D-02	5.116187D-02	6.097276D-02	7.105407D-02	8.139192D-02
15	2.668986D-02	3.219859C-02	3.789029D-02	4.375427D-02	4.978196D-02
16	1.303560D-02	1.580823C-02	1.866295D-02	2.158999D-02	2.458146D-02
17	6.375251D-03	7.803389C-03	9.279296D-03	1.079677D-02	1.235043D-02
18	3.009461D-03	3.728822C-03	4.477966D-03	5.252922D-03	6.050289D-03
19	1.424792D-03	1.788586C-03	2.170280D-03	2.567554D-03	2.978357D-03
20	6.657032D-04	8.492511C-04	1.043451D-C3	1.247039D-03	1.458773D-03
21	3.110084D-04	4.045660D-04	5.045650D-04	6.101468D-04	7.206281D-04
22	1.280283D-04	1.699851C-04	2.153101D-04	2.635535D-04	3.143578D-04
23	4.647872D-05	6.615014C-05	8.547106D-05	1.062382D-04	1.282742D-04
24	1.223711D-05	1.690130D-05	2.203476D-05	2.757475D-05	3.347145D-05

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	1.058176D 01	1.040984C 01	1.026042D 01	1.002244D 01	9.855173D 00
1	1.283027D 01	1.283078C 01	1.286884D 01	1.306879D 01	1.343112D 01
2	1.219043D 01	1.288559C 01	1.357166D 01	1.486869D 01	1.602522D 01
3	1.201099D-01	6.605908C-01	1.287197D 00	2.766052D 00	4.488392D 00
4	-4.442591D 00	-4.272372D 00	-4.050509D 00	-3.455581D 00	-2.692973D 00
5	-2.133273D 00	-1.916552D 00	-1.684284D 00	-1.175867D 00	-6.151124D-01
6	-4.504050D-01	-2.565799C-01	-4.881119D-02	4.069467D-01	9.133028D-01
7	2.319979D-01	3.754540C-01	5.260031D-01	8.470660D-01	1.192210D 00
8	3.768213D-01	4.732153C-01	5.747190D-01	7.920470D-01	1.026570D 00
9	3.565550D-01	4.256629D-01	4.976831D-01	6.496323D-01	8.107202D-01
10	2.208718D-01	2.614164C-01	3.043611D-01	3.969463D-01	4.975409D-01
11	1.624213D-01	1.907636C-01	2.205842D-01	2.841517D-01	3.521507D-01
12	1.286234D-01	1.482315C-01	1.688489D-01	2.128319D-01	2.600428D-01
13	9.943153D-02	1.119480D-01	1.250697D-01	1.530355D-01	1.831071D-01
14	9.197370D-02	1.027871C-01	1.138152D-01	1.364659D-01	1.598339D-01
15	5.596820D-02	6.231056C-02	6.880618D-02	8.226049D-02	9.634245D-02
16	2.763145D-02	3.073581C-02	3.389023D-02	4.034200D-02	4.697578D-02
17	1.393615D-02	1.555087C-02	1.719154D-C2	2.054409D-02	2.398379D-02
18	6.867383D-03	7.702168D-03	8.552591D-03	1.029566D-02	1.208931D-02
19	3.400991D-03	3.834243D-03	4.276875D-03	5.187247D-03	6.127363D-03
20	1.677673D-03	1.902998D-03	2.134046D-03	2.611301D-03	3.106243D-03
21	8.354550D-04	9.541697C-04	1.076360D-03	1.329942D-03	1.594229D-03
22	3.674327D-04	4.225392C-04	4.794774D-04	5.981980D-04	7.225098D-04
23	1.514350D-04	1.756019C-04	2.006759D-04	2.532218D-04	3.085347D-04
24	3.968437D-05	4.618012C-05	5.293090D-05	6.710682D-05	8.206101D-05

A-L COEFFICIENTS FOR (0.0 TO 0.2) TRANSITION

L	0.10 EV	0.20 EV	0.30 EV	0.40 EV	0.50 EV
0	2.397310D-01	2.603020E-01	2.872341D-01	3.157934D-01	3.454208D-01
1	-2.747423D-02	-6.929500E-02	-1.111081D-01	-1.593368D-01	-2.064072D-01
2	-8.986547D-03	-1.438835E-03	7.405805D-03	2.169925D-02	3.885680D-02
3	-3.039773D-02	-2.804498E-02	-2.698676D-02	-2.672009D-02	-2.805040D-02
4	-4.229408D-02	-4.111513E-02	-4.089699D-02	-4.070263D-02	-4.038887D-02
5	-5.666707D-02	-5.751171E-02	-5.863916D-02	-5.896093D-02	-5.979037D-02
6	-2.794659D-02	-2.548482E-02	-2.336437D-02	-2.113282D-02	-1.898433D-02
7	-9.044630D-03	-6.597124E-03	-4.160418D-03	-1.706245D-03	8.052417D-04
8	-1.451036D-02	-1.358981E-02	-1.273403D-02	-1.179241D-02	-1.069796D-02
9	-1.080858D-02	-8.788914D-03	-7.086221D-03	-5.148534D-03	-3.231523D-03
10	-1.652537D-02	-1.542579D-02	-1.477338D-02	-1.394739D-02	-1.319583D-02
11	-1.339695D-02	-1.261655D-02	-1.219247D-02	-1.160858D-02	-1.108722D-02
12	4.042504D-03	4.627658E-03	5.137403D-03	5.763320D-03	6.300507D-03
13	7.141359D-03	7.331727D-03	7.054050D-03	6.779249D-03	6.509530D-03
14	6.806132D-03	6.392849E-03	6.133670D-03	5.893058D-03	5.701755D-03
15	5.403324D-03	5.132052E-03	4.962397D-03	4.827598D-03	4.724194D-03
16	4.127492D-03	3.947844D-03	3.830605D-03	3.732908D-03	3.661150D-03
17	2.535030D-03	2.411863D-03	2.335959D-03	2.276645D-03	2.235378D-03
18	1.515838D-03	1.420835D-03	1.365078D-03	1.326540D-03	1.299721D-03
19	9.901707D-04	9.208750E-04	8.796226D-04	8.510267D-04	8.306659D-04
20	6.552841D-04	5.951611D-04	5.577002D-04	5.303129D-04	5.095275D-04
21	4.200293D-04	3.736364D-04	3.438960D-04	3.215624D-04	3.041159D-04
22	2.007056D-04	1.711419D-04	1.514075D-04	1.364250D-04	1.244854D-04
23	8.271398D-05	6.555697D-05	5.374235D-05	4.469244D-05	3.740997D-05
24	2.263732D-05	1.799625D-05	1.479537D-05	1.233984D-05	1.036080D-05

L	0.60 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	3.771315D-01	4.110808E-01	4.444168D-01	4.783107D-01	5.127734D-01
1	-2.578308D-01	-3.119905D-01	-3.680650D-01	-4.274269D-01	-4.908271D-01
2	5.689377D-02	8.003308D-02	1.073928D-01	1.395254D-01	1.772125D-01
3	-2.7C1C96D-02	-2.695192D-02	-2.704982D-02	-2.727098D-02	-2.765717D-02
4	-3.911922D-02	-3.852868D-02	-3.778498D-02	-3.669730D-02	-3.501363D-02
5	-6.047146D-02	-6.09056D-02	-6.134536D-02	-6.149842D-02	-6.128405D-02
6	-1.677061D-02	-1.491053D-02	-1.275958D-02	-1.050208D-02	-8.366315D-03
7	3.180122D-03	5.526982D-03	7.888111D-03	1.021070D-02	1.252249D-02
8	-9.668182D-03	-8.553803D-03	-7.230301D-03	-5.747259D-03	-4.070254D-03
9	-1.226173D-03	8.314620D-04	3.083279D-03	5.518927D-03	8.190532D-03
10	-1.225369D-02	-1.136867D-02	-1.031338D-02	-9.126653D-03	-7.765792D-03
11	-1.028329D-02	-9.691247C-03	-8.877996D-03	-7.946963D-03	-6.866614D-03
12	6.972814D-03	7.632828D-03	8.324547D-03	9.068021D-03	9.875999D-03
13	6.307598D-03	6.087188D-03	5.868672D-03	5.653134D-03	5.432959D-03
14	5.504204D-03	5.327044D-03	5.161227D-03	5.002081D-03	4.843573D-03
15	4.609113D-03	4.523870D-03	4.449498D-03	4.384141D-03	4.324897D-03
16	3.596081D-03	3.545141D-03	3.502295D-03	3.466196D-03	3.435152D-03
17	2.204060D-03	2.181746D-03	2.163428D-03	2.149364D-03	2.140246D-03
18	1.281023D-03	1.269476D-03	1.261767D-03	1.257790D-03	1.257709D-03
19	8.1e1396D-04	8.061102D-04	7.996090D-04	7.960066D-04	7.949072D-04
20	4.935305D-04	4.812120D-04	4.716736D-04	4.644625D-04	4.592889D-04
21	2.902300D-04	2.790623E-04	2.699412D-04	2.625425D-04	2.566417D-04
22	1.147691D-04	1.067066E-04	9.996120D-05	9.428512D-05	8.952144D-05
23	3.138325D-05	2.630834E-05	2.198717D-05	1.828213D-05	1.509157D-05
24	8.720235D-06	7.336214D-06	6.155332D-06	5.140485D-06	4.264639D-06

A-L COEFFICIENTS FOR (0,0 TO 0,2) TRANSITION

L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	5.478131D-01	5.841328D-01	6.224977D-01	6.648236D-01	7.153516D-01
1	-5.595668D-01	-6.347468D-01	-7.180820D-01	-8.143974D-01	-9.281366D-01
2	2.216902D-01	2.736321D-01	3.340961D-01	4.665300D-01	4.918099D-01
3	-2.838383D-02	-2.939629D-02	-3.087101D-02	-3.325919D-02	-3.681281D-02
4	-3.228721D-02	-2.812660D-02	-2.153367D-02	-1.028661D-02	9.315804D-03
5	-6.063081D-02	-5.547142D-02	-5.767271D-02	-5.486931D-02	-5.071140D-02
6	-6.253098D-03	-4.116879C-03	-1.956615D-03	2.796695D-04	2.640388D-03
7	1.480280D-02	1.706719C-02	1.931848D-02	2.157637D-02	2.386148D-02
8	-2.140564D-03	1.005105D-04	2.741097D-03	6.019105D-03	1.016650D-02
9	1.118557D-02	1.458092D-02	1.850082D-02	2.327459D-02	2.923890D-02
10	-6.166125D-03	-4.290158D-03	-2.047254D-03	7.834335D-04	4.414915D-03
11	-5.590393D-03	-4.087897D-03	-2.300758D-03	-5.601838D-05	2.810843D-03
12	1.077650D-02	1.178754D-02	1.294901D-02	1.435582D-02	1.610401D-02
13	5.207126D-03	4.976986C-03	4.742135D-03	4.490858D-03	4.221439D-03
14	4.683996D-03	4.523394C-03	4.360464D-03	4.187238D-03	4.001355D-03
15	4.270771D-03	4.221867D-03	4.177226D-03	4.136318D-03	4.098926D-03
16	3.408145D-03	3.385158C-03	3.365559D-03	3.348823D-03	3.334876D-03
17	2.134602D-03	2.131972D-03	2.132006D-03	2.134323D-03	2.133789D-03
18	1.260488D-03	1.265834C-03	1.273367D-03	1.282802D-03	1.294057D-03
19	7.957779D-04	7.984825D-04	8.027699D-04	8.084079D-04	8.153382D-04
20	4.557024D-04	4.535880C-04	4.527473D-04	4.530038D-04	4.542859D-04
21	2.519189D-04	2.482685C-04	2.455779D-04	2.436888D-04	2.425588D-04
22	8.550817D-05	8.214633C-05	7.938766D-05	7.713448D-05	7.534374D-05
23	1.233920D-05	9.967118C-06	7.929004D-06	6.187065D-06	4.710405D-06
24	3.507432D-06	2.852992C-06	2.288708D-06	1.804376D-06	1.391567D-06

L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	7.839720D-01	8.971363C-01	1.139186D-00	1.818348D-00	2.396910D-00
1	-1.067668D-00	-1.246885D-00	-1.480945D-00	-1.652807D-00	-6.924491D-01
2	5.893947D-01	6.872454C-01	7.085527D-01	1.282347D-01	-2.008273D-00
3	-4.196956D-02	-4.900540D-02	-5.605294D-02	-3.607210D-02	1.164925D-01
4	4.557378D-02	1.192516C-01	2.924769D-01	7.653345D-01	9.988947D-01
5	-4.451726D-02	-3.510608C-02	-2.071513D-02	-6.942421D-03	-7.176939D-02
6	5.211750D-03	8.155258C-03	1.173285D-02	1.505215D-02	6.864306D-03
7	2.620894D-02	2.868090C-02	3.133801D-02	3.354319D-02	3.011365D-02
8	1.564260D-02	2.324426C-02	3.418633D-02	4.490845D-02	3.823604D-03
9	3.701692D-02	4.773449D-02	6.308490D-02	7.813967D-02	2.079720D-02
10	9.270815C-03	1.608170C-02	2.597598D-02	3.566663D-02	-2.585783D-03
11	6.612487D-03	1.191463C-02	1.956334D-02	2.700827D-02	-2.296294D-03
12	1.837556D-02	2.149494C-02	2.594456D-02	3.027119D-02	1.358027D-02
13	3.923398D-03	3.579299D-03	3.164369D-03	2.850482D-03	4.420724D-03
14	3.794486D-03	3.552722C-03	3.256962D-03	3.012675D-03	4.024202D-03
15	4.064427D-03	4.032928C-03	4.004137D-03	3.977779D-03	3.953548D-03
16	3.323153D-03	3.313791C-03	3.306455D-03	3.301010D-03	3.297220D-03
17	2.145031D-03	2.153069C-03	2.162587D-03	2.173559D-03	2.185839D-03
18	1.306781D-03	1.321020C-03	1.336492D-03	1.353182D-03	1.370966D-03
19	8.233335D-04	8.324059C-04	8.423650D-04	8.531949D-04	8.648138D-04
20	4.564335D-04	4.594457C-04	4.631768D-04	4.676085D-04	4.726722D-04
21	2.420715D-04	2.422193C-04	2.428983D-04	2.440956D-04	2.457599D-04
22	7.396963D-05	7.297626C-05	7.232312D-05	7.198929D-05	7.194939D-05
23	3.472927D-06	2.452565D-06	1.630457D-06	9.903123D-07	5.178555D-07
24	1.043234D-06	7.534234C-07	5.170473D-07	3.297077D-07	1.875772D-07

A-L COEFFICIENTS FOR (0,0 TO 0,2) TRANSITION

L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	1.720223D 00	1.319791C 00	1.322258D 00	1.738712D 00	2.723030D 00
1	-4.890390D-01	-7.430C88C-01	-1.061370D 00	-1.291713D 00	-1.200757D 00
2	-1.589736D 00	-8.263903D-01	-4.257420D-01	-5.878422D-01	-1.718943D 00
3	1.223550D-01	8.690313D-02	6.145449D-02	6.224505D-02	1.137065D-01
4	4.756387D-01	2.157374D-01	2.495859D-01	5.610951D-01	1.220822D 00
5	-9.227972D-02	-7.875687D-02	-5.734539D-02	-3.865578D-02	-3.871674D-02
6	4.566577D-03	7.138805C-03	1.077422D-02	1.401620D-02	1.481587D-02
7	2.991199D-02	3.189598C-02	3.412022D-02	3.586744D-02	3.605261D-02
8	-9.252026D-03	2.325733C-04	1.509237D-02	2.827718D-02	2.904027D-02
9	2.371232D-03	1.544881C-02	3.605888D-02	5.439405D-02	5.561988D-02
10	-1.488944D-02	-6.338385C-03	7.184695D-03	1.919341D-02	1.990584D-02
11	-1.162883D-02	-5.011726C-03	5.371296D-C3	1.455627D-02	1.507986D-02
12	8.272729D-03	1.208771C-02	1.805747D-02	2.334043D-02	2.364458D-02
13	4.902725D-03	4.666946C-03	4.320791D-03	4.047704D-03	3.952120D-03
14	4.341707D-03	4.165350D-03	3.900818D-03	3.679440D-03	3.605224D-03
15	3.941780D-03	3.930718C-03	3.920172D-03	3.910074D-03	3.900417D-03
16	3.295688D-03	3.294639C-03	3.293958D-C7	3.293645D-03	3.293669D-03
17	2.192375D-03	2.199250D-03	2.206406D-C3	2.213854D-03	2.221579D-03
18	1.380215D-03	1.389728C-03	1.399477D-03	1.409467D-03	1.419691D-03
19	8.709019D-04	8.771588D-04	8.835815D-04	8.901773D-04	8.969416D-04
20	4.754305D-04	4.783252C-04	4.813565D-04	4.845181D-04	4.878181D-04
21	2.467600D-04	2.478591C-C4	2.490561D-04	2.503573D-04	2.517562D-04
22	7.203096D-05	7.217676C-C5	7.238305D-C5	7.265617D-05	7.298744D-05
23	3.406167D-07	2.008108C-07	9.707851D-C8	2.823503D-08	-6.914837D-09
24	1.324070D-07	8.731562D-08	5.194596D-C8	2.595994D-08	9.039926D-09

L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	3.660581D 00	3.736128C 00	2.832810D 00	2.139472D 00	1.828070D 00
1	-4.803090D-01	2.141059C-01	2.204239D-C1	-7.304670D-02	-3.796327D-01
2	-3.689460D 00	-4.292901D 00	-3.365295D 00	-2.383236D 00	-1.838263D 00
3	2.201835D-01	2.710214C-01	2.391044D-01	1.972728D-01	1.745918D-01
4	1.888153D 00	1.674231C 00	1.024568D 00	5.718751D-01	3.915173D-01
5	-8.454747D-02	-1.397097D-01	-1.497609D-01	-1.346950D-01	-1.143250D-01
6	9.668397D-03	3.134547C-03	2.307489D-03	4.651467D-03	7.660959D-03
7	3.328650D-02	3.071642C-02	3.137335D-02	3.338066D-02	3.541460D-02
8	-9.601187D-04	-3.761492D-02	-4.408959D-02	-3.353399D-02	-1.926136D-02
9	1.434883D-02	-3.631677C-02	-4.542254D-02	-3.101503D-02	-1.143994D-02
10	-7.394933D-03	-4.085009D-02	-4.689613D-02	-3.745644D-02	-2.462470D-02
11	-5.153970D-03	-3.117197C-02	-3.565302D-02	-2.836727D-02	-1.853963D-02
12	1.166885D-02	-2.943247C-03	-5.515130D-03	-1.319381D-03	4.338734D-03
13	4.146285D-03	4.357986C-03	4.335354D-03	4.239758D-03	4.167333D-03
14	3.825927D-03	4.097469C-03	4.111952D-03	4.007328D-03	3.894301D-03
15	3.891202D-03	3.882291C-03	3.873875D-03	3.865861D-03	3.858284D-03
16	3.294028D-03	3.294640C-03	3.295601D-C3	3.296865D-03	3.298448D-03
17	2.229552D-03	2.237746D-03	2.246131D-03	2.254807D-03	2.263725D-03
18	1.430123D-03	1.440745C-03	1.451542D-C3	1.462568D-03	1.473796D-03
19	9.038533D-04	9.109061C-04	9.181097D-04	9.254476D-04	9.329278D-04
20	4.912392D-04	4.947767D-04	4.984301D-C4	5.021918D-04	5.060718D-04
21	2.6532438D-04	2.548173D-04	2.564751D-04	2.582162D-04	2.600416D-04
22	7.337401D-05	7.381454D-05	7.430755D-05	7.485347D-05	7.544963D-05
23	-9.462073D-09	1.955131D-08	7.915597D-C8	1.684298D-07	2.864586D-07
24	8.867805D-10	1.215350C-09	9.756125D-09	2.625401D-08	5.045649D-08

A-L COEFFICIENTS FOR (0,0 TO 0,2) TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	1.986475D 00	2.726143E 00	3.496888D 00	3.523377D 00	3.126272D 00
1	-5.410669D-01	-3.374264E-01	1.754265D-01	4.445780D-01	3.834842D-01
2	-1.975990D 00	-3.035670D 00	-4.214601D 00	-4.269277D 00	-3.653936D 00
3	1.641280D-01	2.347835E-01	2.858406D-01	2.839346D-01	2.548667D-01
4	5.194756D-01	9.940446D-01	1.430041D 00	1.378301D 00	1.087641D 00
5	-9.991615D-02	-1.088596E-01	-1.451629D-01	-1.717139D-01	-1.751432D-01
6	1.006324D-02	9.770219E-03	6.405788D-03	4.068472D-03	4.228992D-03
7	3.676305D-02	3.645927E-02	3.475734D-02	3.412308D-02	3.494344D-02
8	-8.914093D-03	-1.441217D-02	-3.872570D-02	-5.658714D-02	-5.866580D-02
9	2.842017D-03	-4.496321D-03	-3.758398D-02	-6.200155D-02	-6.493620D-02
10	-1.528126D-02	-2.013908D-02	-4.188775D-02	-5.792361D-02	-5.985462D-02
11	-1.140557D-02	-1.508712D-02	-3.155715D-02	-4.362571D-02	-4.498077D-02
12	8.442577D-03	6.295455D-C3	-3.242487D-03	-1.023655D-02	-1.103827D-02
13	4.087047D-03	3.825937E-03	3.297200D-03	2.852214D-03	2.663535D-03
14	3.789853D-03	3.653763D-03	3.459433D-03	3.288963D-03	3.188849D-03
15	3.851722D-03	3.844922D-03	3.838386D-03	3.832167D-03	3.826242D-03
16	3.300666D-03	3.302854D-03	3.305247D-C3	3.307906D-03	3.310797D-03
17	2.272856D-03	2.282212D-03	2.291762D-03	2.301534D-03	2.311481D-03
18	1.485189D-03	1.496780D-03	1.508532D-03	1.520469D-03	1.532552D-03
19	9.405351D-04	9.482743E-04	9.561263D-04	9.641113D-04	9.722007D-04
20	5.100551D-04	5.141398D-04	5.183149D-04	5.225995D-04	5.269717D-04
21	2.619441D-04	2.639218D-04	2.659673D-04	2.680924D-04	2.702816D-04
22	7.609498D-05	7.678775C-05	7.752506D-05	7.830873D-05	7.913377D-05
23	4.323840D-07	6.053867D-C7	8.046783D-07	1.029522D-06	1.279209D-06
24	8.216452D-08	1.211293D-07	1.671488D-07	2.200267D-07	2.795724D-07

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	2.718843D 00	2.438072E 00	2.364228D 00	2.556851D 00	2.869273D 00
1	2.012019D-01	1.947662D-02	-8.189440D-02	-3.044713D-02	1.281378D-01
2	-3.024307D 00	-2.616014D 00	-2.559548D 00	-2.901213D 00	-3.329880D 00
3	2.287360D-01	2.151756E-01	2.181135D-01	2.349958D-01	2.484420D-01
4	8.151673D-01	6.361437D-01	5.925014D-01	7.095949D-01	8.855362D-01
5	-1.672317D-01	-1.564809E-01	-1.488833D-01	-1.511080D-01	-1.632365D-01
6	5.585271D-03	7.207446D-03	8.476703D-03	8.780517D-03	8.161994D-03
7	3.629077D-02	3.762996D-02	3.861711D-02	3.893757D-02	3.877305D-02
8	-5.292179D-02	-4.518100D-02	-3.955946D-02	-4.073425D-02	-4.882615D-02
9	-5.719956D-02	-4.672056E-02	-3.908098D-02	-4.060680D-02	-5.150618D-02
10	-5.478711D-02	-4.792585D-02	-4.292491D-02	-4.390745D-02	-5.102434D-02
11	-4.104653D-02	-3.577631D-02	-3.193641D-02	-3.264540D-02	-3.797213D-02
12	-8.782353D-03	-5.754583D-03	-3.558042D-C3	-4.008255D-03	-7.136854D-03
13	2.629518D-03	2.651797D-03	2.620434D-03	2.369663D-03	1.875896D-03
14	3.136133D-03	3.102856E-03	3.047260D-03	2.900522D-03	2.653170D-03
15	3.620689D-03	3.815477D-03	3.810592D-03	3.805722D-03	3.801315D-03
16	3.313931D-03	3.317343E-03	3.320993D-03	3.324953D-03	3.328958D-03
17	2.321610D-03	2.331942D-03	2.342456D-03	2.353308D-03	2.364149D-03
18	1.544790D-03	1.557195D-03	1.569751D-03	1.582557D-03	1.595390D-03
19	9.803999D-04	9.887211D-04	9.971487D-04	1.005758D-03	1.014384D-03
20	5.314301D-04	5.359841D-04	5.406231D-04	5.453918D-04	5.501969D-04
21	2.725339D-04	2.748590D-04	2.772462D-04	2.797082D-04	2.822176D-04
22	7.999912D-05	8.090938D-05	8.185917D-05	8.285232D-05	8.387732D-05
23	1.553062D-06	1.850439D-06	2.170728D-06	2.513326D-06	2.877666D-06
24	3.456056D-07	4.179541D-07	4.964553D-07	5.809456D-07	6.712720D-07

A-L COEFFICIENTS FOR {0,0 TO 0,2} TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	3.022656D 00	2.816442C 00	2.666905D 00	2.708634D 00	2.793918D 00
1	2.300681D-01	8.393777C-02	-5.520682D-02	-8.657888D-02	-9.765534D-02
2	-3.276342D 00	-2.765905C 00	-2.476827D 00	-2.501196D 00	-2.484956D 00
3	2.319515D-01	2.076841C-01	1.989013D-01	1.995272D-01	1.926137D-01
4	9.295169D-01	7.705863E-01	6.597522D-01	6.665514D-01	6.943093D-01
5	-1.794873D-01	-1.772044C-01	-1.716840D-01	-1.725101D-01	-1.768167D-01
6	7.791610D-03	9.111224D-03	1.057883D-02	1.144960D-02	1.199015D-02
7	3.927437D-02	4.096304C-02	4.251867D-02	4.353071D-02	4.442012D-02
8	-5.957702D-02	-5.716031D-02	-5.251245D-02	-5.241491D-02	-5.478552D-02
9	-6.608125D-02	-6.293208D-02	-5.677738D-02	-5.671033D-02	-5.997951D-02
10	-6.050747D-02	-5.839209C-02	-5.430670D-02	-5.417866D-02	-5.620306D-02
11	-4.498335D-02	-4.324522C-02	-4.004609D-02	-3.984432D-02	-4.125945D-02
12	-1.128077D-02	-1.034622C-02	-8.554394D-03	-8.535166D-03	-9.453427D-03
13	1.080232D-03	8.065431C-04	6.529370D-04	2.683280D-04	2.495813D-04
14	2.243443D-03	2.057187D-03	1.923380D-03	1.681618D-03	1.377768D-03
15	3.793354D-03	3.784831C-03	3.778333D-03	3.773074D-03	3.768871D-03
16	3.337617D-03	3.346397C-03	3.356243D-03	3.366872D-03	3.378192D-03
17	2.386335D-03	2.408751D-03	2.431900D-03	2.455769D-03	2.480104D-03
18	1.621474D-03	1.648088D-03	1.675200D-03	1.702789D-03	1.730841D-03
19	1.031934D-03	1.049866C-03	1.068154D-03	1.086783D-03	1.105744D-03
20	3.600381D-04	5.701903D-04	5.806301D-04	5.913413D-04	6.023255D-04
21	2.874096D-04	2.928309D-04	2.984650D-04	3.042991D-04	3.103343D-04
22	8.603761D-05	8.834041C-05	9.077706D-05	9.333988D-05	9.602518D-05
23	3.669439D-06	4.541986C-06	5.491540D-06	6.514599D-06	7.607958D-06
24	8.688661D-07	1.088152D-06	1.328119D-06	1.587822D-06	1.866404D-06

L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	2.805142D 00	2.786980D 00	2.774264D 00	2.781781D 00	2.804829D 00
1	-1.578424D-01	-2.359291C-01	-3.084866D-01	-3.682610D-01	-4.193339D-01
2	-2.30619D 00	-2.162224C 00	-2.032642D 00	-1.947944D 00	-1.880971D 00
3	1.818238D-01	1.731119C-01	1.672715D-01	1.627908D-01	1.577108D-01
4	6.773705D-01	6.453785C-01	6.187603D-01	6.054521D-01	6.015444D-01
5	-1.781432D-01	-1.774744C-01	-1.766325D-01	-1.764204D-01	-1.765945D-01
6	1.277522D-02	1.357870C-02	1.431955D-02	1.492214D-02	1.545959D-02
7	4.538860D-02	4.632565D-02	4.726125D-02	4.810736D-02	4.872542D-02
8	-5.513513D-02	-5.415149C-02	-5.297291D-02	-5.226686D-02	-5.204584D-02
9	-6.058217D-02	-5.943121C-02	-5.803738D-02	-5.728436D-02	-5.720625D-02
10	-5.647881D-02	-5.559934D-02	-5.454805D-02	-5.389753D-02	-5.367522D-02
11	-4.135741D-02	-4.059310C-02	-3.971313D-02	-3.914217D-02	-3.889113D-02
12	-9.606340D-03	-9.256365D-03	-8.843028D-03	-8.613823D-03	-8.572231D-03
13	-6.379254D-04	-9.260315D-04	-1.189201D-03	-1.475848D-03	-1.789021D-03
14	1.135025D-03	9.398259D-04	7.554743D-04	5.589104D-04	3.497719D-04
15	3.765857D-03	3.764809C-03	3.764237D-03	3.764628D-03	3.767562D-03
16	3.290262D-03	3.403373D-03	3.417011D-03	3.431252D-03	3.446729D-03
17	2.505138D-03	2.530737D-03	2.556768D-03	2.583274D-03	2.610548D-03
18	1.759334D-03	1.788249D-03	1.817565D-03	1.847271D-03	1.877342D-03
19	1.125022D-03	1.144599C-03	1.164465D-03	1.184609D-03	1.205021D-03
20	6.135598D-04	6.250404C-04	6.367505D-04	6.486840D-04	6.608373D-04
21	3.165556D-04	3.229569C-04	3.295295D-04	3.362668D-04	3.431659D-04
22	9.883109D-05	1.017462D-04	1.047699D-04	1.078978D-04	1.111250D-04
23	8.768657D-06	9.993838C-06	1.128093D-05	1.262753D-05	1.403136D-05
24	2.163080D-06	2.477066D-06	2.807682D-06	3.154285D-06	3.516261D-06

A-L COEFFICIENTS FOR (0,0 TO 0,2) TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	2.926590D 00	3.085712D 00	3.262330D 00	3.442246D 00	3.618559D 00
1	-6.702245D-01	-8.842824D-01	-1.079809D 00	-1.267378D 00	-1.454019D 00
2	-1.559259D 00	-1.340687D 00	-1.156136D 00	-9.727164D-01	-7.745020D-01
3	1.324364D-01	1.042596D-01	6.712410D-02	1.873899D-02	-4.143279D-02
4	5.445192D-01	6.238925D-01	6.769272D-01	7.454086D-01	8.246966D-01
5	-1.789072D-01	-1.828759D-01	-1.881850D-01	-1.943300D-01	-2.010658D-01
6	1.740672D-02	1.849173D-02	1.875070D-02	1.827957D-02	1.724097D-02
7	5.200758D-02	5.441318D-02	5.614146D-02	5.721249D-02	5.779498D-02
8	-5.115610D-02	-5.166343D-02	-5.324360D-02	-5.549954D-02	-5.812189D-02
9	-5.727203D-02	-5.957061D-02	-6.360410D-C2	-6.878080D-02	-7.464597D-02
10	-5.264480D-02	-5.273934D-02	-5.365566D-02	-5.506676D-02	-5.669597D-02
11	-3.783570D-02	-3.779710D-02	-3.853251D-02	-3.977688D-02	-4.132197D-02
12	-8.430955D-03	-9.138537D-03	-1.023350D-02	-1.164381D-02	-1.323223D-02
13	-3.262096D-03	-4.734790D-03	-6.236511D-C3	-7.755313D-03	-9.270861D-03
14	-6.681620D-04	-1.710444D-03	-2.792260D-03	-3.906608D-03	-5.040982D-03
15	3.789453D-03	3.831620D-03	3.893743D-03	3.975139D-03	4.075615D-03
16	3.530399D-03	3.626240D-03	3.732899D-C3	3.848778D-03	3.972848D-03
17	2.751920D-03	2.902760D-03	3.061639D-03	3.227401D-03	3.399103D-03
18	2.033050D-03	2.196579C-03	2.366789D-03	2.542723D-03	2.723605D-03
19	1.310774D-03	1.422068D-03	1.538112D-03	1.658268D-03	1.781999D-03
20	7.245665D-04	7.926620C-04	8.644920D-04	9.396143D-04	1.017602D-03
21	3.798518D-04	4.197631D-04	4.624316D-04	5.074860D-04	5.546351D-04
22	1.286340D-04	1.481604D-04	1.694092D-04	1.921495D-04	2.161988D-04
23	2.183819D-05	3.080320D-05	4.075623D-05	5.156513D-05	6.312491D-05
24	5.537696D-06	7.870248C-06	1.046821D-C5	1.329608D-05	1.632570D-05

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	3.787120D 00	3.945411C 00	4.091887D 00	4.345313D 00	4.542630D 00
1	-1.643574D 00	-1.838134C 00	-2.038691D 00	-2.457299D 00	-2.893073D 00
2	-5.534320D-01	-3.061327C-01	-3.221251D-02	5.877241D-01	1.279360D 00
3	-1.131934D-01	-1.957840D-01	-2.880976D-01	-4.966070D-01	-7.279556D-01
4	9.117485D-01	1.004398D 00	1.100870D 00	1.299418D 00	1.497269D 00
5	-2.082212D-01	-2.156874C-01	-2.233629D-01	-2.390747D-01	-2.548488D-01
6	1.576576D-02	1.392504C-02	1.180536D-02	7.022689D-03	2.029356D-03
7	5.797978D-02	5.785091C-02	5.747592D-02	5.628409D-02	5.479098D-02
8	-6.092210D-02	-6.372163D-02	-6.638133D-02	-7.084777D-02	-7.361105D-02
9	-8.088185D-02	-8.724666C-02	-9.352891D-02	-1.052784D-01	-1.151326D-01
10	-5.835995D-02	-5.992761C-02	-6.129219D-C2	-6.308718D-02	-6.323489D-02
11	-4.302862D-02	-4.478851C-02	-4.650921D-02	-4.955613D-02	-5.173574D-02
12	-1.490219D-02	-1.657905D-02	-1.820032D-C2	-2.107938D-02	-2.321606D-02
13	-1.075898D-02	-1.219581C-02	-1.355661D-02	-1.594886D-02	-1.774947D-02
14	-6.180444D-03	-7.309427D-03	-8.412107D-03	-1.047174D-02	-1.223699D-02
15	4.195325D-03	4.334674C-03	4.493849D-03	4.876749D-03	5.352817D-03
16	4.104260D-03	4.242391D-03	4.386341D-03	4.692040D-03	5.020573D-03
17	3.575959D-03	3.757396C-03	3.942688D-03	4.324349D-03	4.719391D-03
18	2.908777D-03	3.097746D-03	3.289898D-03	3.683112D-03	4.086898D-03
19	1.908811D-03	2.038382D-03	2.170317D-03	2.440702D-03	2.718810D-03
20	1.098097D-03	1.180838C-03	1.265568D-03	1.440275D-03	1.621159D-03
21	6.036437D-04	6.543142C-04	7.064666D-04	8.146855D-04	9.274824D-04
22	2.414089D-04	2.676570D-04	2.948413D-04	3.516861D-04	4.113879D-04
23	7.535037D-05	8.817120D-05	1.015288D-04	1.296632D-04	1.594350D-04
24	1.953416D-05	2.290258D-05	2.641523D-05	3.382190D-05	4.166872D-05

A-L COEFFICIENTS FOR (0,0 TO 0,4) TRANSITION

L	0.10 EV	0.20 EV	0.30 EV	0.40 EV	0.50 EV
0	3.274987D-04	4.045991D-04	5.379522D-04	8.028075D-04	1.345953D-03
1	4.624083D-04	4.793414D-04	4.762654D-04	4.465026D-04	3.534156D-04
2	4.758565D-04	5.175365D-04	5.944526D-04	7.201950D-04	9.268145D-04
3	2.562776D-04	2.727278D-04	2.699291D-04	2.625983D-04	2.071965D-04
4	-7.786238D-06	6.803236D-05	1.470315D-04	2.577145D-04	4.012748D-04
5	-2.449932D-04	-2.468819D-04	-2.412209D-04	-2.185665D-04	-1.546383D-04
6	-3.639819D-04	-1.735945D-04	3.412327D-05	3.395700D-04	7.862243D-04
7	-4.859979D-04	-4.106689D-04	-3.483288D-04	-2.487383D-04	-1.082684D-04
8	-2.279128D-04	-1.412498D-04	-5.542164D-05	5.167225D-05	1.960906D-04
9	-1.145289D-05	8.730711D-06	1.439270D-05	6.969445D-06	-2.417120D-05
10	5.970152D-05	7.363975D-05	8.394586D-05	8.730814D-05	6.478424D-05
11	2.233778D-04	2.397329D-04	2.479094D-04	2.514967D-04	2.406264D-04
12	5.259479D-04	5.413624D-04	5.552795D-04	5.642081D-04	5.691827D-04
13	3.143223D-04	3.321334D-04	3.474783D-04	3.619513D-04	3.841467D-04
14	1.428427D-04	1.532267D-04	1.613007D-04	1.687549D-04	1.782579D-04
15	-9.493740D-05	-1.060651D-04	-1.150015D-04	-1.221383D-04	-1.307907D-04
16	-1.472904D-04	-1.539461D-04	-1.596029D-04	-1.638713D-04	-1.684750D-04
17	2.708228D-05	2.046160D-05	1.450619D-05	8.992373D-06	3.791212D-06
18	2.617828D-05	2.802516D-05	2.850905D-05	2.844005D-05	2.801681D-05
19	-4.735807D-06	3.809649C-07	3.633603D-06	6.097253D-06	8.004707D-06
20	2.084672D-06	3.757011D-06	4.955347D-06	5.956221D-06	6.810562D-06
21	7.944019D-06	7.657948D-06	7.542090D-06	7.503327D-06	7.518860D-06
22	1.939413D-05	1.657350D-05	1.459443D-05	1.304369D-05	1.177043D-05
23	1.331772D-05	1.121286D-05	9.720671D-06	8.545286D-06	7.572512D-06
24	2.647026D-06	2.230395D-06	1.934900D-06	1.702038D-06	1.509248D-06

L	0.60 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	2.389553D-03	4.268460C-03	7.488992D-03	1.284425D-02	2.155641D-02
1	2.502746D-04	7.979208C-05	-1.879361D-04	-5.603081D-04	-1.059473D-03
2	1.408316D-03	2.226990C-03	3.615929D-03	5.908302D-03	9.619295D-03
3	2.316613D-04	2.153951C-04	1.927357D-04	1.663055D-04	1.380640D-04
4	6.676992D-04	1.011644C-03	1.470158D-03	2.077830D-03	2.890403D-03
5	-7.569513D-05	5.277497C-05	2.257448D-04	4.557830D-04	7.533793D-04
6	1.392181D-03	2.208162C-03	3.245295D-03	4.553153D-03	6.210093D-03
7	1.082168D-04	3.875462C-04	7.475892D-04	1.207908D-03	1.789903D-03
8	4.095722D-04	6.799640D-04	1.021179D-03	1.451180D-03	1.994400D-03
9	-4.676502D-05	-9.615259D-05	-1.676281D-04	-2.651154D-04	-3.940130D-04
10	6.687674D-05	4.998191C-05	2.403497D-05	-1.298836D-05	-6.372419D-05
11	2.352735D-04	2.147647C-04	1.801690D-04	1.276755D-04	5.269738D-05
12	5.681325D-04	5.667750C-04	5.544820D-04	5.321698D-04	5.007324D-04
13	3.981015D-04	4.191381C-04	4.408511D-04	4.643301D-04	4.910163D-04
14	1.877623D-04	1.984528C-04	2.096343D-04	2.216272D-04	2.350009D-04
15	-1.343039D-04	-1.398335C-04	-1.437863D-04	-1.469600D-04	-1.502359D-04
16	-1.711627D-04	-1.743580C-04	-1.769968D-04	-1.792357D-04	-1.814965D-04
17	-1.139701D-06	-5.509767C-06	-1.029843D-05	-1.514825D-05	-1.974825D-05
18	2.728700D-05	2.658427C-05	2.551192D-05	2.425263D-05	2.295199D-05
19	9.501814D-06	1.070685C-05	1.169561D-05	1.249853D-05	1.313494D-05
20	7.566352D-06	8.248901C-06	8.870896D-06	9.445698D-06	9.982934D-06
21	7.571673D-06	7.666539C-06	7.771683D-06	7.893866D-06	8.035097D-06
22	1.069331D-05	9.768744C-06	8.958619D-06	8.244003D-06	7.609762D-06
23	6.743654D-06	6.023899D-06	5.390567D-06	4.827901D-06	4.323962D-06
24	1.344901D-06	1.202118C-06	1.076410D-06	9.646592D-07	8.645889D-07

A-L COEFFICIENTS FOR (C.0 TO 0.4) TRANSITION

L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	3.549700D-02	5.812182D-02	9.477011D-02	1.555374D-01	2.595194D-01
1	-1.711211D-03	-2.560661C-03	-3.645144D-03	-5.020959D-03	-6.744758D-03
2	1.551127D-02	2.504165C-02	4.042517D-02	6.581820D-02	1.091551D-01
3	1.101911D-04	8.632463D-05	7.327585D-05	8.215422D-05	1.325896D-04
4	3.974350D-03	5.475211D-03	7.570029D-03	1.058530D-02	1.511817D-02
5	1.134468D-03	1.631629C-03	2.275660D-03	3.123494D-03	4.261908D-03
6	8.287903D-03	1.094418C-02	1.433570D-C2	1.875052D-02	2.462070D-02
7	2.520235D-03	3.455233D-03	4.650026D-03	6.204992D-03	8.273227D-03
8	2.674393D-03	3.544048C-03	4.655936D-03	6.102547D-03	8.028684D-03
9	-5.615111D-04	-7.826552D-04	-1.071541D-03	-1.456132D-03	-1.976643D-03
10	-1.315944D-04	-2.216152D-04	-3.409350D-04	-5.011889D-04	-7.190192D-04
11	-5.669148D-05	-1.932829C-04	-3.873575D-04	-6.530147D-04	-1.021949D-03
12	4.564712D-04	3.943068C-04	3.083660D-04	1.899614D-04	2.460193D-05
13	5.208279D-04	5.548053D-04	5.939055D-04	6.399833D-04	6.959568D-04
14	2.496464D-04	2.660555D-04	2.846527D-04	3.061101D-04	3.317305D-04
15	-1.533481D-04	-1.562160D-04	-1.588278D-04	-1.612982D-04	-1.635958D-04
16	-1.836346D-04	-1.856249D-04	-1.875164D-04	-1.892880D-04	-1.909951D-04
17	-2.420456D-05	-2.861212C-05	-3.296824D-C5	-3.725399D-05	-4.151166D-05
18	2.159367D-05	2.015772D-05	1.864599D-05	1.707835D-05	1.545791D-05
19	1.364115D-05	1.403029D-05	1.431207D-05	1.450529D-05	1.461496D-05
20	1.048515D-05	1.096094D-05	1.140750D-C5	1.183201D-05	1.223548D-05
21	8.187403D-06	8.351342D-06	8.526780D-06	8.709420D-06	8.901746D-06
22	7.042651D-06	6.534162D-06	6.079144D-06	5.670032D-06	5.302846D-06
23	3.8669971D-06	3.459573C-06	3.087562D-06	2.749665D-06	2.442172D-06
24	7.744925D-07	6.930338C-07	6.191533D-C7	5.519916D-07	4.908425D-07
L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	4.480573D-01	8.209330C-01	1.669535D 00	3.882437D 00	4.666581D 00
1	-8.858919D-03	-1.132547C-02	-1.262875D-C2	-2.583287D-03	4.311301D-02
2	1.874141D-01	3.418316C-01	6.922666D-01	1.602327D 00	1.909910D 00
3	2.614274D-04	5.394791D-04	1.213560D-03	2.934805D-03	3.928082D-03
4	2.237558D-02	3.510914D-02	6.065807D-02	1.171836D-01	1.105700D-01
5	5.638773D-03	8.113593D-03	1.149344D-02	1.487732D-02	1.562066D-03
6	3.268845D-02	4.426855C-02	6.138727D-02	7.863927D-02	1.253851D-02
7	1.111466D-02	1.518880D-02	2.120810D-02	2.723897D-02	3.873557D-03
8	1.067755D-02	1.448549C-02	2.012578D-02	2.585179D-02	4.240457D-03
9	-2.700899D-03	-3.753723D-03	-5.322558D-03	-6.932008D-03	-9.622533D-04
10	-1.024031D-03	-1.467805D-03	-2.131306D-03	-2.805470D-03	-2.336400D-04
11	-1.546204D-03	-2.321633D-03	-3.498590D-03	-4.773121D-03	-5.702658D-04
12	-2.112501D-04	-5.609275D-04	-1.091778D-03	-1.660827D-03	2.785926D-04
13	7.667029D-04	8.608356D-04	9.8985150C-04	1.0955850D-03	5.217838D-04
14	3.634012D-04	4.047816C-04	4.605326D-04	5.069091D-04	2.746293D-04
15	-1.657172D-04	-1.677352C-04	-1.695987D-04	-1.713775D-04	-1.730001D-04
16	-1.925891D-04	-1.941501D-04	-1.956059D-04	-1.970253D-04	-1.983599D-04
17	-4.571166D-05	-4.990229D-05	-5.403957D-05	-5.816201D-05	-6.224327D-05
18	1.379562D-05	1.207929C-05	1.033076D-05	8.540100D-06	6.719029D-06
19	1.465576D-05	1.462498D-05	1.453637D-05	1.438957D-05	1.419317D-05
20	1.261902D-05	1.298796C-05	1.333943D-05	1.367842D-05	1.40C227D-05
21	9.098445D-06	9.305250C-06	9.515094D-06	9.732465D-06	9.953249D-06
22	4.972358D-06	4.676604C-06	4.411096D-06	4.174446D-06	3.964020D-06
23	2.162094D-06	1.906891C-06	1.674412D-06	1.462787D-06	1.270483D-06
24	4.351139D-07	3.843016C-07	3.379822D-07	2.957854D-07	2.573858D-07

A-L COEFFICIENTS FOR (0,0 TO 0,4) TRANSITION

L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	2.196152D 00	1.077114D 00	1.335831D 00	2.853739D 00	5.875070D 00
1	3.748704D-02	2.296656C-02	1.481457D-C2	1.753703D-02	3.925012D-02
2	8.903848D-01	4.320608C-01	5.408439D-01	1.166755D 00	2.4095563D 00
3	2.527341D-03	2.126607D-03	2.752976D-03	4.193809D-03	6.022244D-03
4	4.644120D-02	2.646931D-02	4.115177D-02	8.372062D-02	1.535655D-01
5	-2.646718D-03	5.182295D-05	4.742699D-03	8.962325D-03	9.305574D-03
6	-9.482197D-03	5.036849C-03	2.859886D-02	4.988465D-02	5.181936D-02
7	-3.855161D-03	1.283270D-03	9.580093D-03	1.704753D-02	1.763302D-02
8	-3.010750D-03	1.754324D-03	9.521659D-03	1.656669D-02	1.724963D-02
9	1.037224D-03	-3.127495C-04	-2.509213D-03	-4.505494D-03	-4.683605D-03
10	6.224551D-04	4.897100D-05	-8.812751D-04	-1.722524D-03	-1.791630D-03
11	9.078310D-04	-8.913966D-05	-1.758395D-03	-3.318560D-03	-3.512456D-03
12	9.543703D-04	5.024074C-04	-2.517672D-04	-9.530186D-04	-1.034707D-03
13	3.546789D-04	4.658549D-04	6.290639D-04	7.613332D-04	7.574323D-04
14	2.075809D-04	2.547624C-04	3.233804D-04	3.793605D-04	3.792532D-04
15	-1.736078D-04	-1.743725D-04	-1.751152D-04	-1.758337D-04	-1.765514D-04
16	-1.989452D-04	-1.995871C-04	-2.02098D-04	-2.008242D-04	-2.014433D-04
17	-6.431067D-05	-6.633667D-05	-6.835286D-05	-7.036435D-05	-7.237888D-05
18	5.781666D-06	4.851675C-06	3.915331D-06	2.971506D-06	2.017818D-06
19	1.407551D-05	1.394766D-05	1.380905D-05	1.365916D-05	1.349800D-05
20	1.415959D-05	1.431435C-05	1.446628D-C5	1.461418D-05	1.476119D-05
21	1.006609D-05	1.017972C-05	1.029362D-05	1.040887D-05	1.052638D-05
22	3.868260D-06	3.778193D-06	3.693442D-06	3.614417D-06	3.540798D-06
23	1.181114D-06	1.096023D-C6	1.15063D-06	9.380856D-07	8.649360D-07
24	2.395231D-07	2.225075D-07	2.063091D-07	1.908997D-07	1.762511D-07

L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	8.697318D 00	7.424740C 00	4.382232D 00	2.371860D 00	1.635027D 00
1	7.773887D-02	9.012453C-02	7.284735D-02	5.475498D-02	4.573706D-02
2	3.568091D 00	3.041845C 00	1.789009D 00	9.607823D-01	6.553871D-01
3	6.069319D-03	3.163872D-03	9.579588D-04	5.692395D-04	1.399750D-03
4	2.008900D-01	1.502233C-C1	7.652771D-02	3.646326D-02	2.792144D-02
5	-1.355383D-04	-1.188864C-02	-1.413526D-02	-1.092511D-02	-5.468542D-03
6	4.649191D-03	-5.433626C-02	-6.561315D-02	-4.951112D-02	-2.708164D-02
7	1.071437D-03	-1.961381C-02	-2.354013D-02	-1.784462D-02	-9.951132D-03
8	1.694234D-03	-1.783859C-02	-2.163281D-02	-1.632881D-02	-8.897952D-03
9	-2.035708D-04	5.414848C-03	6.506492D-03	4.970192D-03	2.815093D-03
10	1.036189D-04	2.469389C-03	2.923979D-C3	2.275152D-03	1.370716D-03
11	-6.537791D-05	4.373164C-03	5.297409D-03	4.116109D-03	2.402347D-03
12	5.224504D-04	2.517758D-03	2.928253D-C3	2.396979D-03	1.630282D-03
13	4.582540D-04	1.234704D-04	8.177095D-05	1.865287D-04	3.114042D-04
14	2.572060D-04	1.202685D-C4	1.043416D-04	1.491083D-04	2.023441D-04
15	-1.772268D-04	-1.778385C-04	-1.781399D-04	-1.787069D-04	-1.793034D-04
16	-2.020394D-04	-2.026025D-04	-2.030337D-C4	-2.035741D-04	-2.041242D-04
17	-7.438636D-05	-7.638919C-05	-7.843097D-05	-8.043090D-05	-8.242325D-05
18	1.058448D-06	9.184668D-08	-8.974098D-07	-1.878156D-06	-2.862953D-06
19	1.332759D-05	1.314692D-05	1.295701D-05	1.275665D-05	1.254529D-05
20	1.490557D-05	1.504758C-C5	1.518753D-C5	1.532493D-05	1.546097D-05
21	1.064448D-05	1.076312C-05	1.088260D-C5	1.100358D-05	1.112549D-05
22	3.472102D-06	3.408064D-06	3.348598D-06	3.293920D-06	3.243683D-06
23	7.954999D-07	7.296365D-07	6.672181D-C7	6.081528D-07	5.523839D-07
24	1.623394D-07	1.491415C-C7	1.366338D-07	1.247948D-07	1.136044D-07

A-L COEFFICIENTS FOR (0,0 TO 0,4) TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	2.271773D 00	4.359915D 00	6.129526D 00	5.739835D 00	4.389561D 00
1	5.060682D-02	7.272743D-02	9.381437D-02	9.124855D-02	7.693493D-02
2	9.139614D-01	1.771069D 00	2.502956D 00	2.34E573D 00	1.796884D 00
3	2.910976D-03	3.736705D-03	1.901666D-03	-1.031020D-03	-2.833654D-03
4	4.891957D-02	9.443202D-02	1.216525D-01	1.023538D-01	6.979559D-02
5	-3.164143D-03	-4.776537D-03	-1.234374D-02	-1.801787D-02	-1.878940D-02
6	-1.037216D-02	-1.834474D-02	-5.633048D-02	-8.489589D-02	-8.875697D-02
7	-4.094634D-03	-6.912073D-03	-2.023454D-02	-3.020794D-02	-3.150757D-02
8	-3.343798D-03	-5.985015D-03	-1.864662D-02	-2.820955D-02	-2.954263D-02
9	1.213273D-03	2.029984D-03	5.805911D-03	8.657298D-03	9.067284D-03
10	7.000876D-04	1.040517D-03	2.610282D-03	3.789981D-03	3.953265D-03
11	1.100892D-03	1.766186D-03	4.908874D-03	7.338869D-03	7.745063D-03
12	1.049488D-03	1.346417D-03	2.742524D-03	3.817938D-03	3.993535D-03
13	3.957464D-04	3.637269D-04	2.155970D-04	1.253414D-04	1.369981D-04
14	2.387633D-04	2.267227D-04	1.660146D-04	1.293371D-04	1.355122D-04
15	-1.796818D-04	-1.802260D-04	-1.807316D-04	-1.812320D-04	-1.817046D-04
16	-2.045778D-04	-2.050986D-04	-2.056063D-04	-2.061119D-04	-2.066082D-04
17	-8.442758D-05	-8.640862D-05	-8.838320D-05	-9.035737D-05	-9.232526D-05
18	-3.860759D-06	-4.856164D-06	-5.856917D-06	-6.863255D-06	-7.874467D-06
19	1.233087D-05	1.210547D-05	1.187187D-05	1.163117D-05	1.138239D-05
20	1.559470D-05	1.572616D-05	1.585448D-05	1.598249D-05	1.610817D-05
21	1.124798D-05	1.137131D-05	1.149523D-05	1.162041D-05	1.174509D-05
22	3.197718D-06	3.156045D-06	3.118587D-06	3.085099D-06	3.055455D-06
23	4.998127D-07	4.503411D-07	4.038859D-07	3.603589D-07	3.196791D-07
24	1.030433D-07	9.309151D-08	8.373401D-08	7.495290D-08	6.673234D-08

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	3.180354D 00	2.404642D 00	2.215131D 00	2.689864D 00	3.381294D 00
1	6.429439D-02	5.743802D-02	5.836044D-02	6.642427D-02	7.356653D-02
2	1.299577D 00	9.781461D-01	8.964440D-01	1.089377D 00	1.376136D 00
3	-3.217704D-03	-2.782138C-03	-2.068803D-03	-1.956921D-03	-3.124153D-03
4	4.502326D-02	3.152834D-02	3.057485D-02	4.135588D-02	5.323745D-02
5	-1.707043D-02	-1.468492D-02	-1.291617D-02	-1.322505D-02	-1.569305D-02
6	-8.012311D-02	-6.810966D-02	-5.916535D-02	-6.067117D-02	-7.309483D-02
7	-2.843969D-02	-2.420227D-02	-2.105283D-02	-2.156718D-02	-2.589225D-02
8	-2.669661D-02	-2.270787D-02	-1.973494D-02	-2.025242D-02	-2.443791D-02
9	8.232857D-03	7.057872D-03	6.190516D-03	6.382386D-03	7.684402D-03
10	3.660787D-03	3.108936D-03	2.745838D-03	2.825422D-03	3.356960D-03
11	7.094815D-03	6.137641D-03	5.426114D-03	5.618710D-03	6.783325D-03
12	3.702453D-03	3.277280D-03	2.961775D-03	3.045947D-03	3.556554D-03
13	1.908483D-04	2.495634D-04	2.927507D-04	3.042722D-04	2.916316D-04
14	1.593709D-04	1.853741D-04	2.048969D-04	2.109843D-04	2.065303D-04
15	-1.821878D-04	-1.826601D-04	-1.831188D-04	-1.835547D-04	-1.839949D-04
16	-2.070938D-04	-2.075760D-04	-2.080537D-04	-2.086399D-04	-2.091020D-04
17	-9.428491D-05	-9.624400D-05	-9.820003D-05	-1.001882D-04	-1.021352D-04
18	-8.888669D-06	-9.909050D-06	-1.093473D-05	-1.198351D-05	-1.301741D-05
19	1.112634D-05	1.086278D-05	1.059213D-05	1.033351D-05	1.004912D-05
20	1.623162D-05	1.635308D-05	1.647260D-05	1.659805D-05	1.671475D-05
21	1.187187D-05	1.199889D-05	1.212684D-05	1.225305D-05	1.238234D-05
22	3.029385D-06	3.007237D-06	2.988812D-06	2.972774D-06	2.961146D-06
23	2.817690D-07	2.465548D-07	2.139637D-07	1.839292D-07	1.563879D-07
24	5.905718D-08	5.191294D-08	4.528487D-08	3.916028D-08	3.352697D-08

A-L COEFFICIENTS FOR (C,0 TO 0,4) TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	3.461134D 00	2.740853C 00	2.240497D 00	2.207796D 00	2.259681D 00
1	6.631780D-02	5.307560D-02	4.694572D-02	4.665509D-02	4.307949D-02
2	1.419226D 00	1.127371D 00	9.212320D-01	9.077529D-01	9.330536D-01
3	-6.175554D-03	-7.399524C-03	-7.558138D-03	-8.194288D-03	-9.552267D-03
4	4.918843D-02	3.376329C-02	2.485975D-02	2.448262D-02	2.472561D-02
5	-1.903981D-02	-1.849436C-02	-1.706390D-02	-1.695955D-02	-1.753644D-02
6	-9.006489D-02	-8.652088D-02	-7.932924D-02	-7.889635D-02	-8.234872D-02
7	-3.174643D-02	-3.045795D-02	-2.788088D-02	-2.766029D-02	-2.877776D-02
8	-3.019596D-02	-2.906829C-02	-2.670336D-02	-2.650202D-02	-2.782016D-02
9	9.484563D-03	9.182596C-C3	8.500250D-03	8.521560D-03	8.949362D-03
10	4.083994D-03	3.945247C-03	3.651223D-03	3.646601D-03	3.805089D-03
11	8.453835D-03	8.283044D-03	7.752736D-03	7.843303D-03	8.305419D-03
12	4.285362D-03	4.204861C-03	3.968255D-C3	4.003744D-03	4.201100D-03
13	2.993998D-04	3.506650D-04	3.999697D-04	4.375981D-04	4.740089D-04
14	2.116136D-04	2.350277D-04	2.586530D-04	2.771801D-04	2.954215D-04
15	-1.847973D-04	-1.857951D-04	-1.865239D-04	-1.871899D-04	-1.876738D-04
16	-2.099908D-04	-2.108782C-C4	-2.117433D-04	-2.125802D-04	-2.133889D-04
17	-1.060173D-04	-1.098930C-04	-1.137571D-04	-1.176041D-04	-1.214395D-04
18	-1.509654D-05	-1.719241D-05	-1.930469D-05	-2.143039D-05	-2.357155D-05
19	9.460729D-06	8.848197C-06	8.211165D-06	7.552161D-06	6.871075D-06
20	1.694186D-05	1.716330D-C5	1.737832D-C5	1.758702D-05	1.779098D-05
21	1.264261D-05	1.299558D-C5	1.317081D-C5	1.343780D-05	1.370739D-05
22	2.947860D-06	2.947295D-06	2.958799D-06	2.981753D-06	3.015778D-06
23	1.085351D-07	6.993641D-09	4.015944D-08	1.880754D-08	5.510157D-09
24	2.368436D-08	1.566463C-C8	9.382439D-C9	4.760333D-09	1.725116D-09

L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	2.141174D 00	1.967080C 00	1.814188D C0	1.711062D 00	1.642885D 00
1	3.656600D-02	3.050061D-02	2.572550D-02	2.188044D-02	1.804494D-02
2	8.885021D-01	8.197206C-01	7.587084D-01	7.180560D-01	6.919679D-01
3	-1.069698D-02	-1.140981C-02	-1.202103D-02	-1.266508D-02	-1.346609D-02
4	2.209284D-02	1.879328D-02	1.613709D-02	1.461011D-02	1.345127D-02
5	-1.758689D-02	-1.710524C-02	-1.667952D-02	-1.638263D-02	-1.631290D-02
6	-8.267464D-02	-8.089780C-C2	-7.875396D-02	-7.724868D-02	-7.646742D-02
7	-2.881729D-02	-2.810229C-02	-2.728194D-02	-2.669214D-02	-2.634932D-02
8	-2.798852D-02	-2.744046C-02	-2.676521D-02	-2.631444D-02	-2.609426D-02
9	9.045190D-03	8.914330C-03	8.741506D-03	8.637043D-03	8.606833D-03
10	3.826224D-03	3.755737D-03	3.667923D-03	3.604539D-03	3.573917D-03
11	8.465653D-03	8.409960D-03	8.310672D-03	8.270110D-03	8.297513D-03
12	4.266787D-03	4.238871D-03	4.192316D-C3	4.171398D-03	4.180109D-03
13	5.123950D-04	5.480033C-04	5.814283D-C4	6.1491965D-04	6.458778D-04
14	3.142818D-04	3.328022C-04	3.499064D-04	3.667570D-04	3.825825D-04
15	-1.882584D-04	-1.886316D-04	-1.891510D-04	-1.895698D-04	-1.902212D-04
16	-2.141674D-04	-2.148993D-04	-2.156317D-04	-2.163177D-04	-2.170162D-04
17	-1.252596D-04	-1.290607C-04	-1.328599D-C4	-1.366465D-04	-1.404256D-04
18	-2.572556D-05	-2.789312C-05	-3.007318D-05	-3.226452D-05	-3.447012D-05
19	6.169343D-06	5.447946C-06	4.707130D-06	3.948455D-06	3.171661D-06
20	1.798867D-05	1.818269C-05	1.837112D-05	1.855439D-05	1.873368D-05
21	1.397856D-05	1.425214C-05	1.452742D-C5	1.480406D-05	1.508287D-05
22	3.060329D-06	3.114955D-06	3.179313D-06	3.252922D-06	3.335584D-06
23	-7.597818D-11	1.729858C-09	1.062943D-C8	2.634407D-08	4.861454D-08
24	2.091865D-10	1.498445D-10	1.488287D-C9	4.169631D-09	8.143021D-09

A-L COEFFICIENTS FOR (0,0 TO 0,4) TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	1.362481D 00	1.203565D 00	1.111153D 00	1.054675D 00	1.019015D 00
1	-2.086497D-03	-2.141056D-02	-4.180588D-02	-6.372270D-02	-8.726603D-02
2	5.875038D-01	5.331048C-01	5.070834D-01	4.970290D-01	4.966755D-01
3	-1.700277D-02	-2.049544D-02	-2.412489D-02	-2.787875D-02	-3.172999D-02
4	8.988424D-03	7.004386D-03	6.277878D-03	6.303129D-03	6.855102D-03
5	-1.551393D-02	-1.498626C-02	-1.466858D-02	-1.446454D-02	-1.431405D-02
6	-7.263607D-02	-7.027775D-02	-6.910703D-02	-6.864041D-02	-6.857987D-02
7	-2.458392D-02	-2.330263D-02	-2.238669D-02	-2.167134D-02	-2.105802D-02
8	-2.501352D-02	-2.443257D-02	-2.426127D-02	-2.434550D-02	-2.457720D-02
9	8.426570D-03	8.375776D-03	8.439527D-03	8.571630D-03	8.743284D-03
10	3.397241D-03	3.250967D-03	3.126323D-03	3.002656D-03	2.869386D-03
11	8.363465D-03	8.503949D-03	8.721943D-03	8.982801D-03	9.263073D-03
12	4.196187D-03	4.245850D-03	4.329242D-03	4.430751D-03	4.540318D-03
13	7.871020D-04	9.132910C-04	1.032380D-03	1.147874D-03	1.261407D-03
14	4.582170D-04	5.289088C-04	5.978872D-04	6.667795D-04	7.360274D-04
15	-1.921555D-04	-1.932131D-04	-1.935086D-04	-1.929895D-04	-1.917743D-04
16	-2.203197D-04	-2.232699D-04	-2.258738D-04	-2.281209D-04	-2.300979D-04
17	-1.592350D-04	-1.778955D-04	-1.964189D-04	-2.148445D-04	-2.331514D-04
18	-4.566274D-05	-5.710573D-05	-6.876031D-05	-8.60980D-05	-9.261517D-05
19	-9.543948D-07	-5.439877D-06	-1.023089D-05	-1.529705D-05	-2.059367D-05
20	1.956710D-05	2.030915C-05	2.097328D-05	2.156596D-05	2.210039D-05
21	1.649970D-05	1.795096C-05	1.943205D-05	2.093853D-05	2.246750D-05
22	3.672089D-06	4.589865D-06	5.462442D-06	6.468986D-06	7.593102D-06
23	2.502189D-07	5.845016D-07	1.031976D-06	1.577497D-06	2.209029D-06
24	4.579549D-08	1.095967D-07	1.957079D-07	3.011442D-07	4.235342D-07
L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	9.962852D-01	9.820117D-01	9.734485D-01	9.669113D-01	9.680605D-01
1	-1.123441D-01	-1.387869D-01	-1.663812D-01	-2.240587D-01	-2.833327D-01
2	5.027C53D-01	5.131734C-01	5.268384D-01	5.605764D-01	5.992901D-01
3	-3.565409D-02	-3.962868D-02	-4.363091D-02	-5.161197D-02	-5.926867D-02
4	7.835887D-03	9.192762C-03	1.089510D-02	1.525860D-02	2.073839D-02
5	-1.418058D-02	-1.403813D-02	-1.386848D-02	-1.335281D-02	-1.248637D-02
6	-6.875001D-02	-6.905451D-02	-6.942790D-02	-7.021830D-02	-7.091090D-02
7	-2.049294D-02	-1.994535D-02	-1.940354D-02	-1.825691D-02	-1.704027D-02
8	-2.490086D-02	-2.528370C-02	-2.570278D-02	-2.659634D-02	-2.750364D-02
9	8.537683D-03	9.144610D-03	9.355795D-03	9.782171D-03	1.018380D-02
10	2.720858D-03	2.551736D-03	2.360664D-03	1.908985D-03	1.364267D-03
11	9.548978D-03	9.831890C-03	1.010612D-02	1.061350D-02	1.105250D-02
12	4.661922D-03	4.762182D-03	4.868955D-03	5.067191D-03	5.241223D-03
13	1.373724D-03	1.485257C-03	1.596349D-03	1.815583D-03	2.030828D-03
14	8.059957D-04	8.768965C-04	9.488676D-04	1.095375D-03	1.245426D-03
15	-1.898216D-04	-1.871544C-04	-1.837402D-04	-1.748513D-04	-1.629604D-04
16	-2.318001D-04	-2.332455D-04	-2.344784D-04	-2.360548D-04	-2.366811D-04
17	-2.513514D-04	-2.694665D-04	-2.875223D-04	-3.233612D-04	-3.589779D-04
18	-1.047631D-04	-1.170427D-04	-1.294655D-04	-1.545915D-04	-1.801598D-04
19	-2.609779D-05	-3.178947C-05	-3.765750D-05	-4.982150D-05	-6.252409D-05
20	2.258246D-05	2.301692C-05	2.340940D-05	2.407040D-05	2.459832D-05
21	2.401666D-05	2.558353C-05	2.716669D-05	3.037145D-05	3.362500D-05
22	8.821495D-06	1.014308D-05	1.154872D-05	1.458223D-05	1.787211D-05
23	2.916823D-06	3.692819D-06	4.530303D-06	6.367823D-06	8.392913D-06
24	5.609590D-07	7.118274D-07	8.748178D-07	1.232847D-06	1.627863D-06

A-L COEFFICIENTS FOR (0.1 TO 0.1) TRANSITION

L	0.10 EV	0.20 EV	0.30 EV	0.40 EV	0.50 EV
0	8.793349D 00	1.083937E 01	1.203893D C1	1.282C86D 01	1.335736D 01
1	-4.609048D 00	-5.569979E 00	-5.546325D 00	-5.085777D 00	-4.403221D 00
2	-1.121243D 00	-1.960293E 00	-2.711076D 00	-3.418277D 00	-4.121924D 00
3	-4.255398D-01	-5.911132E-01	-7.830514D-01	-9.778071D-01	-1.135204D 00
4	-2.474622D-01	-3.311369E-01	-3.957493D-01	-4.539308D-01	-4.856343D-01
5	-2.045352D-01	-2.575743E-01	-2.957204D-01	-3.184330D-01	-3.449985D-01
6	5.094470D-02	4.1353E2C-02	3.507707D-02	2.890469D-02	2.297789D-02
7	1.012765D-01	9.976862E-02	1.013115D-01	1.042273D-01	1.080393D-01
8	4.2C9119D-02	4.100846D-02	4.576252D-02	5.250869D-02	5.986742D-02
9	9.507128D-02	8.891284E-02	8.607851D-02	8.476770D-02	8.420937D-02
10	3.948694D-02	3.449084E-02	3.429909D-02	3.580233D-02	3.800650D-02
11	7.900527D-02	7.370594E-02	7.C20155D-02	6.748430D-02	6.517751D-02
12	4.472330D-02	4.033830E-02	3.808038D-02	3.671563D-02	3.581649D-02
13	-1.829269D-02	-2.146355E-02	-2.133074D-02	-2.003720D-02	-1.819292D-02
14	-4.355519D-03	-7.051625C-03	-8.302863D-03	-8.884111D-03	-9.010663D-03
15	-3.369255D-04	-1.804901C-03	-2.550032D-03	-2.922054D-03	-3.005905D-03
16	1.100036D-03	1.280057E-04	-4.009120D-04	-7.067548D-04	-8.621623D-04
17	1.395175D-03	7.445320E-04	3.644520D-04	1.234721D-04	-3.296524D-05
18	1.414823D-03	9.620091E-04	6.833330D-04	4.520170D-04	3.575081D-04
19	1.114654D-03	8.218623E-04	6.355227D-04	5.034627D-04	4.C61701D-04
20	8.186496D-04	6.2703E2C-04	5.021291D-04	4.110379D-04	3.416299D-04
21	5.672752D-04	4.436C95C-04	3.617312D-04	3.007696D-04	2.532977D-04
22	3.154407D-04	2.474029C-04	2.C15261D-04	1.669722D-04	1.396584D-04
23	1.624293D-04	1.270791D-04	1.C28912D-C4	8.448044D-05	6.976271D-05
24	4.677529D-05	3.682102E-05	2.998902D-05	2.477312D-05	2.059024D-05

L	0.60 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	1.374787D 01	1.402C88C 01	1.422036D C1	1.437148D 01	1.449170D 01
1	-3.595466D 00	-2.750078E 00	-1.881973D 00	-1.036443D 00	-2.310971D-01
2	-4.787841D 00	-5.407768E 00	-5.996276D 00	-6.556074D 00	-7.094327D 00
3	-1.321250D 00	-1.522999E 00	-1.736253D 00	-1.958391D 00	-2.191381D 00
4	-5.144710D-01	-5.308430E-01	-5.301189D-C1	-5.050857D-01	-4.482201D-01
5	-3.609149D-01	-3.654977E-01	-3.618103D-01	-3.476616D-01	-3.210381D-01
6	2.110797D-02	2.635400D-02	3.270517D-02	4.314535D-02	6.095256D-02
7	1.145120D-01	1.235571E-01	1.353653D-C1	1.503774D-01	1.691710D-01
8	6.849653D-02	7.816664E-02	8.927983D-02	1.019379D-01	1.161263D-01
9	8.481508D-02	8.639932E-02	8.918012D-02	9.316651D-02	9.838899D-02
10	4.082425D-02	4.392384E-02	4.748984D-02	5.146399D-02	5.585576D-02
11	6.336214D-02	6.179756D-02	6.0723398D-02	6.007751D-02	5.985255D-02
12	3.529423D-02	3.494694E-02	3.490184D-02	3.509720D-02	3.552005D-02
13	-1.609888D-02	-1.392535E-02	-1.166315D-02	-9.381104D-03	-7.108651D-03
14	-8.912925D-03	-8.619329E-03	-8.149306D-03	-7.536006D-03	-6.805158D-03
15	-2.576428D-03	-2.832776E-03	-2.590981D-03	-2.267171D-03	-1.873639D-03
16	-9.295272D-04	-9.227739E-04	-8.577644D-04	-7.437451D-04	-5.875023D-C4
17	-1.265048D-04	-1.700388E-04	-1.794912D-C4	-1.592565D-04	-1.118422D-04
18	2.634371D-04	2.013915D-04	1.613748D-C4	1.404793D-04	1.370030D-04
19	3.336843D-04	2.798859E-04	2.408749D-04	2.139904D-04	1.972905D-04
20	2.876663D-04	2.454558E-04	2.124403D-04	1.869882D-04	1.679013D-04
21	2.154443D-04	1.849210E-04	1.600956D-C4	1.399753D-04	1.238156D-04
22	1.175135D-04	9.929381E-05	8.414731D-05	7.152738D-05	6.102689D-05
23	5.766893D-05	4.756396D-05	3.903387D-C5	3.179110D-05	2.562385D-05
24	1.714123D-05	1.424845E-05	1.179611D-C5	9.703746D-06	7.912765D-06

A-L COEFFICIENTS FOR (0,1 TO 0,1) TRANSITION

L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	1.459570D 01	1.469650E 01	1.481020D 01	1.495544D 01	1.516520D 01
1	5.221608D-01	1.214175D 00	1.837632D 00	2.383220D 00	2.839949D 00
2	-7.622175D 00	-8.142021D 00	-8.669253D 00	-9.194505D 00	-9.710570D 00
3	-2.437871D 00	-2.702534E 00	-2.991347D 00	-3.314200D 00	-3.685686D 00
4	-3.475498D-01	-1.875822E-01	6.047840D-02	4.353072D-01	1.015960D 00
5	-2.785260D-01	-2.166764E-01	-1.284617D-01	-6.232720D-03	1.651410D-01
6	8.716341D-02	1.232746E-01	1.732499D-01	2.411886D-01	3.351138D-01
7	1.929897D-01	2.229718E-01	2.614316D-01	3.108863D-01	3.762032D-01
8	1.325607D-01	1.518784E-01	1.751983D-01	2.038357D-01	2.402260D-01
9	1.051742D-01	1.138355E-01	1.249221D-01	1.391666D-01	1.578378D-01
10	6.082979D-02	6.654926E-02	7.329147D-02	8.144887D-02	9.164807D-02
11	6.012414D-02	6.098010E-02	6.254264D-02	6.503144D-02	5.876053D-02
12	3.619561D-02	3.716025D-02	3.846401D-02	4.021253D-02	4.254590D-02
13	-4.857999D-03	-2.621896D-03	-4.043154D-04	1.813297D-03	4.044888D-03
14	-5.576335D-03	-5.056733E-03	-4.062543D-03	-2.996737D-03	-1.869494D-03
15	-1.421571D-03	-9.179260D-04	-3.693437D-04	2.191343D-04	3.434358D-04
16	-3.961315D-04	-1.738656D-04	7.531856D-05	3.483348D-04	6.427254D-04
17	-4.229574D-05	4.623002D-05	1.514887D-04	2.715696D-04	4.049172D-04
18	1.477267D-04	1.706638D-04	2.043373D-04	2.475339D-04	2.992630D-04
19	1.892182D-04	1.886742D-04	1.947267D-04	2.066166D-04	2.237475D-04
20	1.541834D-04	1.451581D-04	1.402440D-04	1.389636D-04	1.409518D-04
21	1.109919D-04	1.010808D-04	9.373351D-05	8.864011D-05	8.558062D-05
22	5.232122D-05	4.517214D-05	3.940216D-05	3.484325D-05	3.137321D-05
23	2.037276D-05	1.591627D-05	1.215733D-05	9.016900D-06	6.430782D-06
24	6.379006D-06	5.068062D-06	3.952590D-06	3.01467D-06	2.223414D-06

L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	1.550010D 01	1.609698D 01	1.730159D 01	1.996929D 01	1.958039D 01
1	3.185779D 00	3.403164D 00	3.441470D 00	3.513842D 00	5.733210D 00
2	-1.015438D 01	-1.027667D 01	-8.975683D 00	-2.034895D-01	2.160512D 01
3	-4.129966D 00	-4.687326D 00	-5.407214D 00	-6.040810D 00	-4.030739D 00
4	1.953697D 00	3.583995D 00	6.768253D 00	1.340557D 01	1.131285D 01
5	4.101801D-01	7.724707D-01	1.321922D 00	1.907301D 00	-1.213899D-01
6	4.679696D-01	6.627329D-01	9.559697D-01	1.264907D 00	1.854494D-01
7	4.653116D-01	5.922183D-01	7.791237D-01	9.751810D-01	3.242783D-01
8	2.883365D-01	3.551577D-01	4.518180D-01	5.536460D-01	2.378678D-01
9	1.830232D-01	2.184529D-01	2.701350D-01	3.258638D-01	1.645312D-01
10	1.049379D-01	1.231704D-01	1.493499D-01	1.777304D-01	1.004708D-01
11	7.426907D-02	8.252829D-02	9.514804D-02	1.096247D-01	7.180507D-02
12	4.571391D-02	5.016955D-02	5.667761D-02	6.429429D-02	4.888222D-02
13	6.321106D-03	8.701614D-03	1.133329D-02	1.475777D-02	1.924486D-02
14	-6.873534D-04	5.472281D-04	1.866663D-03	3.694808D-03	8.0532500-03
15	1.500008D-03	2.186080D-03	2.899154D-03	3.637111D-03	4.398276D-03
16	9.562919D-04	1.287395D-03	1.634448D-03	1.996178D-03	2.371595D-03
17	5.501607D-04	7.062811D-04	8.722677D-04	1.047352D-03	1.230857D-03
18	3.586220D-04	4.249826D-04	4.976752D-04	5.762157D-04	6.601575D-04
19	2.455704D-04	2.716966D-04	3.017134D-04	3.353243D-04	3.722538D-04
20	1.458635D-04	1.534604D-04	1.634809D-04	1.757422D-04	1.9005685D-04
21	8.433815D-05	8.476573D-05	8.669862D-05	9.002544D-05	9.463497D-05
22	2.688483D-05	2.728856D-05	2.650390D-05	2.646702D-05	2.711955D-05
23	4.344449D-06	2.711798D-06	1.493408D-06	6.552455D-07	1.675129D-07
24	1.576155D-06	1.055784D-06	6.512639D-07	3.530613D-07	1.528839D-07

A-L COEFFICIENTS FOR (0,1 TO 0,1) TRANSITION

L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	1.653978D 01	1.562307D 01	1.634957D 01	1.837479D 01	2.160521D 01
1	6.309613D 00	5.947837D 00	5.418074D 00	5.056333D 00	5.460626D 00
2	1.513465D 01	7.115512D 00	4.101548D 00	7.435156D 00	2.017725D 01
3	-3.617376D 00	-4.379185D 00	-5.341354D 00	-6.082490D 00	-5.831900D 00
4	3.795049D 00	1.956750C 00	4.151653D 00	9.352761D 00	1.699813D 01
5	-8.343441D-01	-3.776054C-01	3.902982D-01	1.106033D 00	1.206122D 00
6	-1.866945D-01	6.017193D-02	4.691432D-01	8.473317D-01	8.951569D-01
7	1.024022D-01	2.582049D-01	5.125484D-01	7.474445D-01	7.788729D-01
8	1.303329D-01	2.097393C-01	3.383775D-01	4.576522D-01	4.751601D-01
9	1.086644D-01	1.515018C-01	2.208267D-01	2.858278D-01	2.965388D-01
10	7.361498D-02	9.482786C-02	1.292907D-01	1.617792D-01	1.674642D-01
11	5.806626D-02	6.874165C-02	8.6577795D-02	1.037525D-01	1.069677D-01
12	4.313664D-02	4.838541D-02	5.703998D-02	6.553549D-02	6.757882D-02
13	2.037495D-02	2.171769D-02	2.367226D-02	2.603813D-02	2.776645D-02
14	9.370327D-03	9.999015C-03	1.078360D-02	1.186435D-02	1.303008D-02
15	4.786203D-03	5.179884C-03	5.578772D-03	5.982530D-03	6.391016D-03
16	2.563752D-03	2.759146C-03	2.957538D-03	3.158762D-03	3.362735D-03
17	1.325522D-03	1.422077C-03	1.520460D-03	1.620592D-03	1.722422D-03
18	7.040298D-04	7.490900D-04	7.953167D-04	8.426664D-04	8.911083D-04
19	3.918849D-04	4.122516C-04	4.333337D-04	4.551066D-04	4.775508D-04
20	1.979591D-04	2.063078D-04	2.151026D-04	2.243252D-04	2.339676D-04
21	9.739216D-05	1.004332C-04	1.037498D-04	1.073355D-04	1.111806D-04
22	2.768757D-05	2.840893C-05	2.927775D-05	3.029224D-05	3.144503D-05
23	4.695320D-08	4.657847D-09	3.784327D-C8	1.439728D-07	3.205973D-07
24	8.725527D-08	4.347933C-08	2.078105D-08	1.842928D-08	3.573614D-08
L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	2.360792D 01	2.101063D 01	1.752908D 01	1.573109D 01	1.543749D 01
1	7.477626D 00	9.493592D 00	9.729226D 00	9.131262D 00	8.452310D 00
2	3.835300D 01	4.029172D 01	2.905865D 01	1.948208D 01	1.519974D 01
3	-3.491511D 00	-1.136394D 00	-1.070756D 00	-2.078462D 00	-3.185939D 00
4	2.078039D 01	1.353517D 01	5.176742D 00	1.326212D 00	1.138236D 00
5	-3.257859D-01	-2.305976D 00	-2.720024D 00	-2.196971D 00	-1.437619D 00
6	7.746509D-02	-9.684597D-01	-1.179232D 00	-8.960797D-01	-4.912571D-01
7	2.791581D-01	-3.584264D-01	-4.823928D-01	-3.034259D-01	-5.043277D-02
8	2.258940D-01	-9.313789D-02	-1.540239D-01	-6.225695D-02	6.708372D-02
9	1.627597D-01	-1.008468D-02	-4.326285D-02	7.220287D-03	7.883840D-02
10	1.012631D-01	1.526861C-02	-1.302015D-03	2.395683D-02	5.991509D-02
11	7.156602D-02	2.483976D-02	1.535387D-02	2.880600D-02	4.841764D-02
12	5.128897D-02	2.933019D-02	2.501069D-02	3.175823D-02	4.158943D-02
13	2.625014D-02	2.285900D-C2	2.243904D-02	2.447998D-02	2.752269D-02
14	1.347045D-02	1.312144D-02	1.339461D-02	1.445374D-02	1.594653D-02
15	6.804020D-03	7.221157D-03	7.641829D-03	8.067623D-03	8.497703D-03
16	3.569356D-03	3.778429C-03	3.989627D-03	4.203637D-03	4.420065D-03
17	1.025985D-03	1.930914C-03	2.037349D-03	2.145395D-03	2.254897D-03
18	9.405965D-04	9.910925D-04	1.042528D-03	1.094961D-03	1.148325D-03
19	5.006363D-04	5.243435D-04	5.486594D-04	5.735597D-04	5.990281D-04
20	2.440102D-04	2.544405C-04	2.652482D-04	2.764198D-04	2.879476D-04
21	1.152739D-04	1.196078C-04	1.241756D-04	1.289703D-04	1.339858D-04
22	3.273114D-05	3.414657C-05	3.568745D-05	3.735071D-05	3.913198D-05
23	5.654020D-07	8.762316D-07	1.251063D-06	1.687942D-06	2.184907D-06
24	7.204866D-08	1.267497D-07	1.992560D-07	2.890149D-07	3.954999D-07

A-L COEFFICIENTS FOR (0,1 TO 0,1) TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	1.649869D 01	1.856006D 01	1.956295D 01	1.843265D 01	1.684455D 01
1	8.156505D 00	8.952817E 00	1.075614D 01	1.185445D 01	1.189779D 01
2	1.768076D 01	2.770072D 01	3.647492D 01	3.453208D 01	2.784026D 01
3	-3.783696D 00	-2.930002D 00	-7.279458D -C1	5.532487D -01	4.406809D -01
4	4.012708D 00	8.714054E 00	1.028948D 01	7.054584D 00	3.274193D 00
5	-8.529667D -01	-1.108367E 00	-2.428090D 00	-3.452823D 00	-3.617744D 00
6	-1.826343D -01	-3.223266D -01	-1.022177D 00	-1.558893D 00	-1.638793D 00
7	1.422816D -01	5.789707D -02	-3.712164D -01	-6.980345D -01	-7.425954D -01
8	1.658224D -01	1.237708D -01	-9.387969D -02	-2.594962D -01	-2.811633D -01
9	1.339964D -01	1.111204D -01	-1.000689D -02	-1.026142D -01	-1.147440D -01
10	8.770051D -02	7.618984E -02	1.496867D -02	-3.199561D -02	-3.828291D -02
11	6.373293D -02	5.711483E -C2	2.226822D -02	-4.806011D -03	-8.826567D -03
12	4.941505D -02	4.648732D -C2	2.953092D -02	1.629951D -02	1.449359D -02
13	3.030306D -02	3.020119D -02	2.579563D -02	2.212679D -02	2.184996D -02
14	1.742867D -02	1.784208E -02	1.650180D -02	1.537194D -02	1.561196D -02
15	8.931016D -03	9.368875E -03	9.810216D -03	1.025504D -02	1.070365D -02
16	4.638416D -03	4.859243E -03	5.082138D -03	5.307038D -03	5.533972D -03
17	2.365615D -03	2.477823D -03	2.591359D -03	2.706178D -03	2.822228D -03
18	1.202510D -03	1.257619E -03	1.313573D -03	1.370353D -03	1.427922D -03
19	6.250436D -04	6.515938E -04	6.786581D -04	7.062303D -04	7.342864D -04
20	2.998167D -04	3.120175E -04	3.245378D -04	3.373766D -04	3.505176D -04
21	1.392137D -04	1.446479D -04	1.502806D -04	1.561114D -04	1.621295D -04
22	4.102797D -05	4.303515E -05	4.514978D -05	4.737002D -05	4.969143D -05
23	2.740171D -06	3.352014E -06	4.018785D -06	4.738952D -06	5.511029D -06
24	5.182176D -07	6.566897D -07	8.104552D -C7	9.790911D -07	1.162183D -06

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	1.571617D 01	1.515412E 01	1.517126D 01	1.565948D 01	1.608947D 01
1	1.151328D 01	1.109212D 01	1.091535D C1	1.126795D 01	1.203149D 01
2	2.207569D 01	1.881566E 01	1.873458D C1	2.161643D 01	2.446591D 01
3	-2.361036D -01	-9.574512D -01	-1.345981D 00	-1.015555D 00	-1.212727D -01
4	8.450391D -01	-1.773703E -01	9.628150D -C2	1.245316D 00	2.009983D 00
5	-3.322536D 00	-2.915022D 00	-2.595732D 00	-2.647442D 00	-3.101940D 00
6	-1.482301D 00	-1.258035D 00	-1.088073D 00	-1.115689D 00	-1.354773D 00
7	-6.415913D -01	-4.992265E -01	-3.910125D -01	-4.054794D -01	-5.506398D -01
8	-2.284419D -01	-1.544932D -01	-9.807279D -C2	-1.048320D -01	-1.789629D -01
9	-8.493239D -02	-4.291488D -02	-1.063339D -02	-1.422020D -02	-5.630944D -02
10	-2.328447D -02	-2.038269E -03	1.429117D -C2	1.231283D -02	-9.344138D -03
11	-5.549589D -04	1.135820D -02	2.057763D -02	1.918695D -02	6.240713D -03
12	1.882923D -02	2.507549E -02	2.998112D -02	2.952891D -02	2.317983D -02
13	2.359014D -02	2.607666D -02	2.819762D -02	2.844314D -02	2.645745D -02
14	1.671916D -02	1.817917D -02	1.950766D -02	2.001533D -02	1.951121D -02
15	1.115569D -02	1.161127D -02	1.207023D -C2	1.253396D -02	1.299928D -02
16	5.762897D -03	5.993790E -03	6.226569D -03	6.461959D -03	6.698235D -03
17	2.939476D -03	3.057910D -03	3.177489D -03	3.298635D -03	3.420398D -03
18	1.486262D -03	1.545362D -03	1.605197D -03	1.665977D -03	1.727216D -03
19	7.628166D -04	7.918144E -04	8.212630D -04	8.512880D -04	8.816006D -04
20	3.639531D -04	3.776798E -04	3.916871D -04	4.066381D -04	4.205860D -04
21	1.683302D -04	1.747132E -04	1.812703D -04	1.880250D -04	1.949182D -04
22	5.211131D -05	5.462932E -05	5.724122D -05	5.995651D -05	6.274894D -05
23	6.333608D -06	7.205348D -06	8.124969D -06	9.091204D -06	1.010287D -05
24	1.359342D -06	1.570195E -06	1.794388D -06	2.031565D -06	2.281394D -06

A-L COEFFICIENTS FOR (0.1 TO 0.1) TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	1.565354D 01	1.486943C 01	1.445735D 01	1.440388D 01	1.431336D 01
1	1.283575D 01	1.267018C 01	1.246072D 01	1.264995D 01	1.293254D 01
2	2.239016D 01	1.784100C 01	1.564906D 01	1.571454D 01	1.522210D 01
3	7.192077D-01	2.711959D-01	-2.177043D-01	-1.423642D-01	8.406868D-02
4	6.603136D-01	-1.041113D 00	-1.775544D 00	-1.821567D 00	-2.049587D 00
5	-3.752910D 00	-3.648865C 00	-3.392134D C0	-3.383109D 00	-3.525387D 00
6	-1.689433D 00	-1.624632C 00	-1.481754D C0	-1.470946D 00	-1.538174D 00
7	-7.504140D-01	-7.024362C-01	-6.068679D-01	-5.937979D-01	-6.288288D-01
8	-2.804351D-01	-2.540972C-01	-2.029014D-01	-1.944989D-01	-2.112277D-01
9	-1.140312D-01	-9.833756C-02	-6.801394D-02	-6.237672D-02	-7.132812D-02
10	-3.922349D-02	-3.149731C-02	-1.619923D-02	-1.359484D-02	-1.852341D-02
11	-1.192398D-02	-7.829692C-03	9.432518D-04	2.201642D-03	-1.047657D-03
12	1.434295D-02	1.689607C-02	2.190450D-02	2.304515D-02	2.184022D-02
13	2.367871D-02	2.523619C-02	2.786760D-02	2.892594D-02	2.894607D-02
14	1.901299D-02	2.052344C-02	2.257473D-02	2.399391D-02	2.474508D-02
15	1.393943D-02	1.488938D-02	1.585180D-02	1.682625D-02	1.781081D-02
16	7.176014D-03	7.659387C-03	8.149385D-C3	8.645774D-03	9.147558D-03
17	3.667091D-03	3.917231C-03	4.171328D-03	4.429433D-03	4.690811D-03
18	1.851722D-03	1.978811C-03	2.108365D-03	2.240274D-03	2.374434D-03
19	9.434678D-04	1.006927C-03	1.071899D-03	1.138318D-03	1.206122D-03
20	4.504529D-04	4.813131D-04	5.131166D-04	5.458199D-04	5.793885D-04
21	2.091848D-04	2.240689C-04	2.395394D-04	2.555685D-04	2.721358D-04
22	6.659281D-05	7.476883C-05	8.126065D-05	8.805334D-05	9.513492D-05
23	1.225804D-05	1.458203C-05	1.706692D-05	1.970541D-05	2.249081D-05
24	2.817784D-06	3.401211C-06	4.029471D-06	4.700521D-06	5.412505D-06

L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	1.410431D 01	1.389639C 01	1.373159D 01	1.361070D 01	1.351049D 01
1	1.299425D 01	1.294846D 01	1.289681D 01	1.288566D 01	1.289739D 01
2	1.389092D 01	1.266624C 01	1.182971D C1	1.133511D 01	1.096031D 01
3	2.834697D-02	-1.580883D-01	-3.367331D-01	-4.437468D-01	-5.048368D-01
4	-2.483870D 00	-2.863221C 00	-3.129701D 00	-3.306413D 00	-3.450978D 00
5	-3.550147D 00	-3.489285C 00	-3.409724D 00	-3.352131D 00	-3.318066D 00
6	-1.542333D 00	-1.501444C 00	-1.451022D 00	-1.412409D 00	-1.385804D 00
7	-6.247264D-01	-5.925999C-01	-5.545898D-01	-5.242093D-01	-5.012999D-01
8	-2.072080D-01	-1.885629C-01	-1.666208D-01	-1.486364D-01	-1.346471D-01
9	-6.806879D-02	-5.608658C-02	-4.203843D-02	-3.022227D-02	-2.068649D-02
10	-1.711579D-02	-1.116333C-02	-4.099108D-03	1.836904D-03	6.602313D-03
11	-4.001517D-04	3.103232C-03	7.364076D-C3	1.099950D-02	1.397005D-02
12	2.267595D-02	2.502446C-02	2.778948D-02	3.024012D-02	3.235080D-02
13	2.983943D-02	3.142160C-02	3.321293D-02	3.486840D-02	3.636921D-02
14	2.602193D-02	2.765057C-02	2.939807D-02	3.109129D-02	3.271798D-02
15	1.880653D-02	1.981232C-02	2.082919D-02	2.185461D-02	2.288976D-02
16	9.655227D-03	1.016809C-02	1.068677D-02	1.120984D-02	1.173774D-02
17	4.956020D-03	5.224143C-03	5.495716D-03	5.770311D-03	6.047521D-03
18	2.510758D-03	2.649151C-03	2.789527D-03	2.931819D-03	3.075965D-03
19	1.275252D-03	1.345652D-03	1.417271D-03	1.490063D-03	1.563980D-03
20	6.137824D-04	6.489688C-04	6.849137D-04	7.215886D-04	7.589677D-04
21	2.892162D-04	3.067884C-04	3.248325D-04	3.433301D-04	3.622652D-04
22	1.024934D-04	1.101157D-04	1.179923D-04	1.261134D-04	1.344692D-04
23	2.541695D-05	2.847783C-05	3.166809D-05	3.498271D-05	3.841691D-05
24	6.163726D-06	6.952471D-06	7.777271D-06	8.636739D-06	9.529533D-06

A-L COEFFICIENTS FOR (0.1 TO 0.1) TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	1.308336D 01	1.278959D 01	1.256267D 01	1.237900D 01	1.222567D 01
1	1.280772D 01	1.268195D 01	1.254533D 01	1.246700D 01	1.227938D 01
2	9.675442D 00	9.536202D 00	9.889568D 00	1.048412D 01	1.119779D 01
3	-8.183410D-01	-9.256288D-01	-8.612570D-01	-6.588679D-01	-3.421976D-01
4	-3.986423D 00	-4.223647D 00	-4.314541D 00	-4.307914D 00	-4.225554D 00
5	-3.125147D 00	-2.943720D 00	-2.773069D 00	-2.599187D 00	-2.414891D 00
6	-1.237891D 00	-1.090928D 00	-9.439353D-01	-7.893238D-01	-6.233282D-01
7	-3.774294D-01	-2.553775D-01	-1.346748D-01	-1.072123D-02	1.188707D-01
8	-5.803592D-02	1.901302D-02	9.661575D-02	1.773026D-01	2.623709D-01
9	3.227739D-02	8.682119D-02	1.424436D-01	2.001877D-01	2.606794D-01
10	3.372039D-02	6.257260D-02	9.291894D-02	1.253359D-01	1.601608D-01
11	3.157103D-02	5.111747D-02	7.213390D-02	9.480571D-02	1.191735D-01
12	4.453515D-02	5.801012D-02	7.249874D-02	8.809189D-02	1.048161D-01
13	4.468838D-02	5.366069D-02	6.313592D-02	7.317811D-02	8.383361D-02
14	4.137802D-02	5.047769D-02	5.985586D-02	6.949143D-02	7.937552D-02
15	2.820565D-02	3.373124D-02	3.944779D-02	4.534432D-02	5.141221D-02
16	1.444776D-02	1.725873C-02	2.015611D-02	2.312950D-02	2.617060D-02
17	7.476019D-03	8.964493C-03	1.050395D-02	1.208773D-02	1.371007D-02
18	3.622681D-03	4.607453C-03	5.4244682D-03	6.270011D-03	7.139731D-03
19	1.949102D-03	2.357413C-03	2.785525D-03	3.230861D-03	3.691157D-03
20	9.555298D-04	1.166316C-03	1.389248D-03	1.622884D-03	1.865814D-03
21	4.629491D-04	5.724712D-04	6.895376D-04	8.131412D-04	9.424921D-04
22	1.794819D-04	2.292492D-04	2.830737D-04	3.404133D-04	4.008373D-04
23	5.723400D-05	7.847142D-05	1.017736D-04	1.268643D-04	1.535242D-04
24	1.445219D-05	2.004940D-05	2.622204D-05	3.289318D-05	4.000173D-05

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	1.209661D 01	1.198801C 01	1.189717D 01	1.176055D 01	1.167223D 01
1	1.217284D 01	1.209553C C1	1.205336D 01	1.208587D 01	1.227389D 01
2	1.196905D 01	1.276314C C1	1.355878D 01	1.510377D 01	1.653696D 01
3	7.483259D-02	5.822777D-01	1.171958D 00	2.567409D 00	4.197210D 00
4	-4.077891D 00	-3.871213D 00	-3.610161D 00	-2.939814D 00	-2.094065D 00
5	-2.216561D 00	-2.002827D 00	-1.773629D 00	-1.271495D 00	-7.170519D-01
6	-4.440987D-01	-2.510099C-01	-4.408904D-02	4.097558D-01	9.141145D-01
7	2.551898D-01	3.985944C-01	5.489935D-01	8.695796D-01	1.214126D 00
8	3.524524D-01	4.477266C-01	5.481665D-01	7.637079D-01	9.971253D-01
9	3.242023D-01	3.907643C-01	4.602716D-01	6.075209D-01	7.646671D-01
10	1.975278D-01	2.374454C-01	2.798442D-01	3.717114D-01	4.722469D-01
11	1.452098D-01	1.728482C-01	2.019806D-01	2.643292D-01	3.314664D-01
12	1.226626D-01	1.415999C-01	1.615688D-01	2.044001D-01	2.507564D-01
13	9.512794D-02	1.070697C-01	1.196471D-01	1.466560D-01	1.760073D-01
14	8.950152D-02	9.986335D-02	1.104503D-01	1.322772D-01	1.549391D-01
15	5.764633D-02	6.404443D-02	7.060372D-C2	8.421119D-02	9.848358D-02
16	2.927316D-02	3.243277C-02	3.564476D-02	4.221882D-02	4.898500D-02
17	1.536653D-02	1.705383D-02	1.876861D-02	2.227383D-02	2.587155D-02
18	8.030894D-03	8.941267C-03	9.868550D-03	1.176891D-02	1.372407D-02
19	4.164515D-03	4.649556C-03	5.145002D-03	6.163528D-03	7.214887D-03
20	2.116912D-03	2.375333C-03	2.640273D-03	3.187411D-03	3.754706D-03
21	1.076912D-03	1.215895C-03	1.358947D-03	1.655816D-03	1.965222D-03
22	4.639963D-04	5.296020D-04	5.974139D-04	7.388725D-04	8.870649D-04
23	1.815752D-04	2.108704C-04	2.412874D-04	3.050871D-04	3.723086D-04
24	4.749803D-05	5.534115C-05	6.349699D-05	8.063558D-05	9.872850D-05

A-L COEFFICIENTS FOR (0,1 TO 0,3) TRANSITION

L	0.10 EV	0.20 EV	0.30 EV	0.40 EV	0.50 EV
0	1.439841D-01	1.563610C-01	1.725796D-01	1.898328D-01	2.078507D-01
1	-1.627902D-02	-4.136396D-02	-6.645320D-02	-9.540365D-02	-1.236872D-01
2	-5.180436D-03	-6.332848D-04	4.707684D-03	1.333963D-02	2.372600D-02
3	-1.812474D-02	-1.670578C-02	-1.607209D-02	-1.591533D-02	-1.673815D-02
4	-2.537991D-02	-2.463884D-02	-2.447285D-02	-2.430704D-02	-2.405498D-02
5	-3.410913D-02	-3.461675D-02	-3.529071D-02	-3.547370D-02	-3.594295D-02
6	-1.692972D-02	-1.536805D-02	-1.400345D-02	-1.252877D-02	-1.104116D-02
7	-5.642777D-03	-4.140794D-03	-2.651063D-03	-1.134297D-03	4.350257D-04
8	-8.807509D-03	-8.216644D-03	-7.695053D-03	-7.052480D-03	-6.325626D-03
9	-6.490237D-03	-5.269468D-03	-4.245336D-03	-3.086023D-03	-1.949656D-03
10	-9.886855D-03	-9.222746D-03	-8.826720D-03	-8.329623D-03	-7.888705D-03
11	-7.938891D-03	-7.463385D-03	-7.205300D-03	-6.853370D-03	-6.545386D-03
12	2.659257D-03	3.017200D-03	3.329233D-03	3.708751D-03	4.033274D-03
13	4.784514D-03	4.546651C-03	4.386865D-03	4.228417D-03	4.076510D-03
14	4.147165D-03	3.903810C-03	3.751891D-03	3.610837D-03	3.500278D-03
15	3.199800D-03	3.032091C-03	2.926326D-03	2.842275D-03	2.776387D-03
16	2.411033D-03	2.300286C-03	2.227428D-03	2.166913D-03	2.121812D-03
17	1.533055D-03	1.456212C-03	1.408022D-03	1.369984D-03	1.342912D-03
18	9.211379D-04	8.649564C-04	8.317177D-04	8.085638D-04	7.922843D-04
19	5.919976D-04	5.526943C-04	5.293885D-04	5.133259D-04	5.019572D-04
20	3.940970D-04	3.587665C-04	3.368225D-04	3.208349D-04	3.087434D-04
21	2.555483D-04	2.275854C-04	2.096896D-04	1.962723D-04	1.858113D-04
22	1.290430D-04	1.100511C-04	9.733091D-05	8.765218D-05	7.992254D-05
23	5.554737D-05	4.431767C-05	3.656571D-05	3.061337D-05	2.581154D-05
24	1.475885D-05	1.178904C-05	9.737176D-06	8.160367D-06	6.887259D-06

L	0.60 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	2.273409D-01	2.485456C-01	2.699785D-01	2.926950D-01	3.172491D-01
1	-1.545872D-01	-1.871588C-01	-2.209225D-01	-2.567051D-01	-2.949671D-01
2	3.476218D-02	4.900962C-02	6.604278D-02	8.634116D-02	1.106027D-01
3	-1.610362D-02	-1.607542C-02	-1.614423D-02	-1.628867D-02	-1.653294D-02
4	-2.317477D-02	-2.266759D-02	-2.201758D-02	-2.109490D-02	-1.972356D-02
5	-3.631652D-02	-3.657088D-02	-3.670688D-02	-3.669648D-02	-3.643559D-02
6	-9.443620D-03	-7.964915C-03	-6.213394D-03	-4.276897D-03	-2.259748D-03
7	1.956170D-03	3.488432D-03	5.065128D-03	6.663265D-03	8.309009D-03
8	-5.618877D-03	-4.830076C-03	-3.884323D-03	-2.803386D-03	-1.555752D-03
9	-7.564881D-04	4.561427C-04	1.775466D-03	3.193527D-03	4.739203D-03
10	-7.322494D-03	-6.798987C-03	-6.177348D-03	-5.481764D-03	-4.687797D-03
11	-6.125406D-03	-5.719297D-03	-5.246723D-03	-4.711433D-03	-4.096547D-03
12	4.436192D-03	4.831597C-03	5.241165D-03	5.677332D-03	6.148147D-03
13	3.961493D-03	3.838596D-03	3.717137D-03	3.598249D-03	3.478005D-03
14	3.385972D-03	3.284428D-03	3.189907D-03	3.099749D-03	3.010589D-03
15	2.705777D-03	2.652174C-03	2.605794D-03	2.565169D-03	2.528167D-03
16	2.081576D-03	2.049592D-03	2.022712D-03	2.000507D-03	1.980426D-03
17	1.321929D-03	1.306599C-03	1.293480D-03	1.282886D-03	1.275371D-03
18	7.807411D-04	7.735010C-04	7.683991D-04	7.654527D-04	7.648264D-04
19	4.939068D-04	4.884247D-04	4.849634D-04	4.831589D-04	4.827820D-04
20	2.994811D-04	2.923934D-04	2.869468D-04	2.828755D-04	2.800102D-04
21	1.775032D-04	1.708448C-04	1.654188D-04	1.610339D-04	1.575562D-04
22	7.361406D-05	6.836561C-05	6.395833D-05	6.023507D-05	5.709498D-05
23	2.182713D-05	1.846229C-05	1.558811D-05	1.311501D-05	1.097670D-05
24	5.829875D-06	4.936003D-06	4.171604D-06	3.513029D-06	2.943045D-06

A-L COEFFICIENTS FOR (0,1 TO 0,3) TRANSITION

L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	3.444643D-01	3.763115D-01	4.156186D-01	4.680219D-01	5.445973D-01
1	-3.365006D-01	-3.819862D-01	-4.324693D-01	-4.908700D-01	-5.598796D-01
2	1.399080D-01	1.753089D-01	2.184244D-01	2.731705D-01	3.436038D-01
3	-1.698132D-02	-1.759941D-02	-1.849004D-02	-1.991900D-02	-2.202876D-02
4	-1.760595D-02	-1.444254D-02	-9.555745D-03	-1.467384D-03	1.230867D-02
5	-3.587428D-02	-3.495768C-02	-3.359222D-02	-3.153337D-02	-2.853266D-02
6	-6.834615D-05	2.393951D-03	5.197453D-03	8.501365D-03	1.252677D-02
7	1.000178D-02	1.177598D-02	1.365777D-02	1.570360D-02	1.799388D-02
8	-9.571948D-05	1.635439D-03	3.713963D-03	6.323706D-03	9.663203D-03
9	6.461780D-03	8.400705D-03	1.062425D-02	1.331758D-02	1.666483D-02
10	-3.758162D-03	-2.672590D-03	-1.379879D-03	2.473095D-04	2.329385D-03
11	-3.376765D-03	-2.538642D-03	-1.552613D-03	-3.238393D-04	1.232306D-03
12	6.668774D-03	7.247774D-03	7.906460D-03	8.697919D-03	9.673337D-03
13	3.355755D-03	3.232772C-03	3.109239D-03	2.978952D-03	2.842182D-03
14	2.921351D-03	2.832283D-03	2.742791D-03	2.648392D-03	2.548249D-03
15	2.494308D-03	2.463691D-03	2.435746D-03	2.410103D-03	2.386646D-03
16	1.963272D-03	1.948595D-03	1.935995D-03	1.925166D-03	1.916039D-03
17	1.270004D-03	1.266467D-03	1.264551D-03	1.264037D-03	1.264824D-03
18	7.658903D-04	7.684595D-04	7.723073D-04	7.772716D-04	7.833045D-04
19	4.835295D-04	4.853252C-04	4.880229D-04	4.914916D-04	4.956985D-04
20	2.780815D-04	2.770243D-04	2.767184D-04	2.770610D-04	2.780095D-04
21	1.547902D-04	1.526728C-04	1.511364D-04	1.500841D-04	1.494916D-04
22	5.443497D-05	5.219187D-05	5.033444D-05	4.880070D-05	4.756306D-05
23	9.123507D-06	7.517859C-06	6.129652D-06	4.934312D-06	3.911653D-06
24	2.443678D-06	2.019810C-06	1.648404D-06	1.327955D-06	1.053092D-06

L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	6.695198D-01	9.031409C-01	1.425527D-00	2.816536D-00	3.512182D-00
1	-6.445382D-01	-7.531644D-01	-8.941798D-01	-9.928325D-01	-3.963081D-01
2	4.369320D-01	5.642724D-01	7.328057D-01	7.890860D-01	-3.561153D-01
3	-2.506555D-02	-2.916347D-02	-3.309240D-02	-2.033890D-02	7.164131D-02
4	3.728897D-02	8.715501D-02	2.024453D-01	5.112823D-01	6.484790D-01
5	-2.411534D-02	-1.745761D-02	-7.320883D-03	2.446691D-03	-4.236738D-02
6	1.765525D-02	2.456807D-02	3.432294D-02	4.398207D-02	9.691254D-03
7	2.066522D-02	2.395912D-02	2.822863D-02	3.223212D-02	1.978977D-02
8	1.413114D-02	2.038443C-02	2.945659D-02	3.843475D-02	4.179810D-03
9	2.100975D-02	2.697237D-02	3.548536D-02	4.380291D-02	1.205065D-02
10	5.107364D-03	8.9966665D-03	1.463834D-02	2.015310D-02	-1.655310D-03
11	3.280291D-03	6.116940D-03	1.018307D-02	1.408358D-02	-1.631228D-03
12	1.093145D-02	1.264767D-02	1.508150D-02	1.742457D-02	8.271979D-03
13	2.694796D-03	2.530173D-03	2.338556D-03	2.197215D-03	2.884338D-03
14	2.438203D-03	2.311536C-03	2.158858D-03	2.032898D-03	2.535579D-03
15	2.365004D-03	2.345208C-03	2.327105D-03	2.310499D-03	2.295240D-03
16	1.908297D-03	1.901985D-03	1.896937D-03	1.893039D-03	1.890172D-03
17	1.266702D-03	1.269663C-03	1.273535D-03	1.278285D-03	1.283840D-03
18	7.902001D-04	7.979803C-04	8.064866D-04	8.157048D-04	8.255656D-04
19	5.005138D-04	5.059435D-04	5.118796D-04	5.183123D-04	5.251963D-04
20	2.794686D-04	2.814399C-04	2.838347D-04	2.866444D-04	2.898265D-04
21	1.492866D-04	1.494673D-04	1.499679D-04	1.507829D-04	1.518796D-04
22	4.659172D-05	4.586425C-05	4.535436D-05	4.504889D-05	4.493142D-05
23	3.044687D-06	2.319046D-06	1.722457D-06	1.244315D-06	8.753725D-07
24	8.193242D-07	6.228547D-07	4.604427D-07	3.292848D-07	2.269400D-07

A-L COEFFICIENTS FOR (0.1 TO 0.3) TRANSITION

L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	2.008201D 00	1.270592E 00	1.387058D 00	2.311555D 00	4.244960D 00
1	-2.767625D-01	-4.355979C-01	-6.302378D-01	-7.672333D-01	-7.030098D-01
2	-5.581149D-01	-3.038072C-01	-1.507009D-02	1.658523D-01	3.955097D-02
3	7.453625D-02	5.308704C-02	3.809624D-02	3.921095D-02	7.090042D-02
4	3.060237D-01	1.412066C-01	1.680412D-01	3.738662D-01	8.007446D-01
5	-5.663304D-02	-4.723109D-02	-3.229937D-02	-1.921022D-02	-1.909423D-02
6	-1.474364D-03	6.521882C-03	1.917514D-02	3.058068D-02	3.192035D-02
7	1.623379D-02	1.970793C-02	2.472995D-02	2.909715D-02	2.949068D-02
8	-6.889327D-03	9.192437C-04	1.328727D-02	2.432928D-02	2.509022D-02
9	1.883728D-03	9.130286C-03	2.052012D-02	3.063399D-02	3.129032D-02
10	-8.657015D-03	-3.781266D-03	3.9191390-03	1.075048D-02	1.114722D-02
11	-6.573817D-03	-3.046653C-03	2.441269D-03	7.258849D-03	7.486827D-03
12	5.387802D-03	7.475918C-03	1.072259D-02	1.358070D-02	1.372688D-02
13	3.099270D-03	3.007214C-03	2.872059D-03	2.766993D-03	2.707909D-03
14	2.697283D-03	2.612438C-03	2.484215D-03	2.376268D-03	2.331692D-03
15	2.287909D-03	2.280932D-03	2.274274D-03	2.267896D-03	2.261783D-03
16	1.888993D-03	1.888078D-C3	1.887393D-03	1.886932D-03	1.886671D-03
17	1.286843D-03	1.290067C-03	1.293465D-C3	1.297039D-03	1.300779D-03
18	8.306984D-04	8.359934C-04	8.414265D-04	8.470007D-04	8.527113D-04
19	5.287969D-04	5.324943C-04	5.362863D-04	5.401771D-04	5.441540D-04
20	2.915514D-04	2.933571D-04	2.952433D-04	2.972060D-04	2.992514D-04
21	1.525298D-04	1.532398C-04	1.540086D-04	1.548405D-04	1.557321D-04
22	4.493780D-05	4.498525C-05	4.507136D-05	4.520011D-05	4.536615D-05
23	7.293098D-07	6.076078C-07	5.093860D-07	4.338680D-07	3.802671D-07
24	1.858989D-07	1.512816D-07	1.228605D-07	1.004203D-07	8.375778D-08

L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	6.181823D 00	5.541561C 00	3.647345D 00	2.337843D 00	1.823520D 00
1	-2.536348D-01	1.685189C-01	1.646310D-01	-1.949247D-02	-2.074520D-01
2	-6.278578D-01	-1.223810C 00	-1.224062D 00	-1.002927D 00	-8.116747D-01
3	1.348075D-01	1.640119D-01	1.438884D-01	1.186167D-01	1.053772D-01
4	1.222176D 00	1.071305C 00	6.487531D-01	3.593310D-01	2.473199D-01
5	-5.678872D-02	-8.910963C-02	-9.613887D-02	-8.567259D-02	-7.146992D-02
6	7.867346D-03	-2.226872D-02	-2.777691D-02	-1.921405D-02	-7.439711D-03
7	2.044809D-02	9.712602C-03	8.361734D-C3	1.209745D-02	1.692603D-02
8	1.769218D-04	-3.049721C-02	-3.606834D-C2	-2.737764D-02	-1.551146D-02
9	8.518819D-03	-1.938346D-02	-2.436175D-02	-1.640008D-02	-5.612368D-03
10	-4.390907D-03	-2.341255D-02	-2.683813D-02	-2.146269D-02	-1.416561D-02
11	-3.481439D-03	-1.675955D-02	-1.903741D-02	-1.519093D-02	-1.005607D-02
12	7.233509D-03	-6.469446D-04	-2.007632D-03	2.736954D-04	3.327810D-03
13	2.691440D-03	2.669667C-03	2.637555D-C3	2.626756D-03	2.638802D-03
14	2.409870D-03	2.511934C-03	2.513545D-03	2.470667D-03	2.426511D-03
15	2.255954D-03	2.250335D-03	2.245152D-03	2.240091D-03	2.235280D-03
16	1.886622D-03	1.886739D-03	1.887123D-03	1.887641D-03	1.888347D-03
17	1.304671D-03	1.308697D-03	1.312820D-03	1.317137D-03	1.321602D-03
18	8.585440D-04	8.644877D-04	8.705263D-04	8.767063D-04	8.830050D-04
19	5.482353D-04	5.523867D-04	5.566245D-04	5.609382D-04	5.653337D-04
20	3.013682D-04	3.035539D-04	3.058081D-04	3.081262D-04	3.105146D-04
21	1.566771D-04	1.576740C-04	1.587217D-C4	1.598202D-04	1.609696D-04
22	4.556756D-05	4.580342D-05	4.607279D-05	4.637605D-05	4.671141D-05
23	3.478783D-07	3.360137D-07	3.440350D-07	3.713480D-07	4.173791D-07
24	7.268290D-08	6.701433C-08	6.657981D-08	7.121676D-08	8.077072D-08

A-L COEFFICIENTS FOR (0,1 TO 0,3) TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	2.201561D 00	3.573426E 00	4.822366D 00	4.665064D 00	3.826679D 00
1	-3.021482D-01	-1.701326C-01	1.469512D-01	3.073017D-01	2.642838D-01
2	-7.793891D-01	-1.034260D 00	-1.416336D 00	-1.517578D 00	-1.393747D 00
3	1.117705D-01	1.425308D-01	1.723496D-01	1.699025D-01	1.516606D-01
4	3.334274D-01	6.383965D-01	9.120927D-01	8.724711D-01	6.836048D-01
5	-6.135598D-02	-6.743868D-02	-9.258388D-C2	-1.110363D-01	-1.134367D-01
6	1.428094D-03	-2.291088C-03	-2.119229D-02	-3.529042D-02	-3.691015D-02
7	2.023799D-02	1.880353D-02	1.186128D-02	7.048100D-03	6.962696D-03
8	-6.634588D-03	-1.130731E-02	-3.152281D-02	-4.648986D-02	-4.832954D-02
9	2.244443D-03	-1.795578C-03	-1.996999D-02	-3.335324D-02	-3.493182D-02
10	-8.857605D-03	-1.162100C-02	-2.397252D-02	-3.306973D-02	-3.415577D-02
11	-6.354057D-03	-8.267300C-03	-1.675257D-C2	-2.291370D-02	-2.354621D-02
12	5.531986D-03	4.375681C-03	-7.265926D-C4	-4.445068D-03	-4.848058D-03
13	2.628115D-03	2.457218D-03	2.074141D-03	1.767036D-03	1.659009D-03
14	2.380029D-03	2.293023D-03	2.149444D-C3	2.030861D-03	1.973537D-03
15	2.231175D-03	2.226852D-03	2.222706D-03	2.218752D-03	2.214987D-03
16	1.889476D-03	1.890558C-03	1.891768D-03	1.893138D-03	1.894653D-03
17	1.326190D-03	1.330923C-03	1.335775D-C3	1.340761D-03	1.345855D-03
18	8.893978D-04	8.959097D-04	9.025160D-04	9.092310D-04	9.160313D-04
19	5.698014D-04	5.743448C-04	5.789521D-04	5.836362D-04	5.883793D-04
20	3.129640D-04	3.154733C-04	3.180354D-04	3.206630D-04	3.233422D-04
21	1.621656D-04	1.634070D-04	1.646894D-04	1.660201D-04	1.673895D-04
22	4.707820D-05	4.747534C-05	4.790108D-05	4.835639D-05	4.883824D-05
23	4.815694D-07	5.633836C-07	6.623118D-C7	7.778730D-07	9.096048D-07
24	9.509574D-08	1.140516D-07	1.375044D-07	1.653284D-07	1.974022D-07

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	3.044796D 00	2.531573C 00	2.403040D 00	2.729605D 00	3.224361D 00
1	1.492964D-01	3.721398D-02	-2.319866D-02	1.125359D-02	1.095789D-01
2	-1.236995D 00	-1.134877D 00	-1.137309D 00	-1.256560D 00	-1.386312D 00
3	1.358115D-01	1.278688C-01	1.299486D-C1	1.401277D-01	1.476767D-01
4	5.091107D-01	3.956988D-01	3.690897D-01	4.441373D-01	5.549828D-01
5	-1.079259D-01	-1.004152C-01	-9.507048D-02	-9.654260D-02	-1.049166D-01
6	-3.225911D-02	-2.594649C-02	-2.120969D-02	-2.169665D-02	-2.758940D-02
7	9.134604D-03	1.182141C-02	1.381345D-02	1.377713D-02	1.175617D-02
8	-4.361823D-02	-3.720136C-02	-3.250677D-02	-3.344163D-02	-4.015699D-02
9	-3.066069D-02	-2.489550D-02	-2.069725D-02	-2.152746D-02	-2.748842D-02
10	-3.127192D-02	-2.737376D-02	-2.453457D-02	-2.508873D-02	-2.912267D-02
11	-2.147467D-02	-1.873794D-02	-1.675024D-02	-1.709003D-02	-1.976947D-02
12	-3.623877D-03	-1.996181C-03	-8.184811D-C4	-1.051199D-03	-2.701422D-03
13	1.662532D-03	1.701996C-03	1.702372D-03	1.557030D-03	1.255152D-03
14	1.952511D-03	1.944102C-03	1.919422D-03	1.834084D-03	1.683693D-03
15	2.211441D-03	2.208104C-03	2.204969D-C3	2.201853D-03	2.199013D-03
16	1.896317D-03	1.898150C-03	1.900128D-C3	1.902243D-03	1.904441D-03
17	1.351061D-03	1.356390C-03	1.361829D-C3	1.367457D-03	1.373096D-03
18	9.229234D-04	9.299128C-04	9.369905D-C4	9.442084D-04	9.514483D-04
19	5.931850D-04	5.980605C-04	6.029968D-04	6.080476D-04	6.130969D-04
20	3.260721D-04	3.288585D-04	3.316950D-04	3.346120D-04	3.375469D-04
21	1.687967D-04	1.702483D-04	1.717375D-04	1.732707D-04	1.748338D-04
22	4.934586D-05	4.988218D-05	5.044386D-05	5.103262D-05	5.164246D-05
23	1.057068D-06	1.219843C-06	1.397532D-06	1.589742D-06	1.796105D-06
24	2.336110D-07	2.738449C-07	3.179998D-07	3.655720D-07	4.176641D-07

A-L COEFFICIENTS FOR (0.1 TO 0.3) TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	3.351875D 00	2.908023D 00	2.595920D 00	2.606423D 00	2.680654D 00
1	1.675154D-01	7.395182D-02	-1.225933D-C2	-3.121173D-02	-3.944677D-02
2	-1.335038D 00	-1.158489D 00	-1.076659D C0	-1.097272D 00	-1.076283D 00
3	1.364262D-01	1.213218D-01	1.159816D-01	1.160744D-01	1.113228D-01
4	5.795717D-01	4.773577D-01	4.069001D-01	4.108120D-01	4.275761D-01
5	-1.161545D-01	-1.145424D-01	-1.105943D-01	-1.110436D-01	-1.138840D-01
6	-3.535387D-02	-3.298699D-02	-2.891014D-02	-2.819529D-02	-2.940534D-02
7	9.455097D-03	1.104095D-02	1.311970D-C2	1.382495D-02	1.386195D-02
8	-4.916664D-02	-4.721543D-02	-4.337563D-02	-4.327207D-02	-4.523583D-02
9	-3.543339D-02	-3.367809D-02	-3.028854D-02	-3.023884D-02	-3.201021D-02
10	-3.448937D-02	-3.328181D-02	-3.096126D-02	-3.088648D-02	-3.203068D-02
11	-2.323275D-02	-2.226578D-02	-2.058199D-02	-2.042063D-02	-2.105377D-02
12	-4.863855D-03	-4.338905D-03	-3.374968D-03	-3.341658D-03	-3.804901D-03
13	7.812055D-04	6.397770D-04	5.695265D-04	5.554849D-04	6.092181D-05
14	1.440117D-03	1.338769D-03	1.268985D-C3	1.132162D-03	9.579592D-04
15	2.193880D-03	2.188323D-03	2.184100D-03	2.180649D-03	2.177912D-03
16	1.909241D-03	1.914115D-03	1.919638D-03	1.925643D-03	1.932076D-03
17	1.384682D-03	1.396409D-03	1.408582D-03	1.421193D-03	1.434089D-03
18	9.661747D-04	9.812115D-04	9.965399D-C4	1.012149D-03	1.028028D-03
19	6.233650D-04	6.338519D-04	6.445420D-04	6.554263D-04	6.665001D-04
20	3.0435526D-04	3.497423D-04	3.561017D-C4	3.626215D-04	3.693024D-04
21	1.780647D-04	1.814343D-04	1.849327D-04	1.885518D-04	1.922928D-04
22	5.293272D-05	5.431416D-05	5.578126D-05	5.732915D-05	5.895605D-05
23	2.249901D-06	2.756275D-06	3.312772D-06	3.917119D-06	4.567224D-06
24	5.318460D-07	6.598534D-07	8.010412D-C7	9.548086D-07	1.120609D-06

L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	2.634718D 00	2.546446D 00	2.470864D 00	2.429541D 00	2.413068D 00
1	-7.645386D-02	-1.280016D-01	-1.738756D-C1	-2.112320D-01	-2.435804D-01
2	-1.003481D 00	-9.330143D-01	-8.823818D-C1	-8.496305D-01	-8.210415D-01
3	1.043400D-01	9.879613D-02	9.502022D-02	9.204553D-02	8.864157D-02
4	4.162413D-01	3.955797D-01	3.784283D-01	3.697647D-01	3.669050D-01
5	-1.147023D-01	-1.140870D-01	-1.133926D-01	-1.131334D-01	-1.132069D-01
6	-2.907915D-02	-2.780735D-02	-2.641003D-02	-2.537946D-02	-2.470976D-02
7	1.442547D-02	1.530549D-02	1.623144D-02	1.700124D-02	1.752444D-02
8	-4.552042D-02	-4.468665D-02	-4.367939D-02	-4.305542D-02	-4.282496D-02
9	-3.232922D-02	-3.169680D-02	-3.093732D-02	-3.053193D-02	-3.049849D-02
10	-3.218674D-02	-3.169038D-02	-3.109864D-02	-3.073650D-02	-3.061673D-02
11	-2.105193D-02	-2.061810D-02	-2.013425D-02	-1.980970D-02	-1.964689D-02
12	-3.867454D-03	-3.669876D-03	-3.442565D-03	-3.314339D-03	-3.285513D-03
13	-1.550242D-04	-3.120618D-04	-4.551082D-04	-6.125325D-04	-7.863555D-04
14	8.206958D-04	7.118076D-04	6.087985D-04	4.983494D-04	3.798998D-04
15	2.175844D-03	2.175049D-03	2.174475D-03	2.174523D-03	2.175994D-03
16	1.938972D-03	1.946513D-C3	1.954370D-C3	1.962610D-03	1.971586D-03
17	1.447412D-03	1.461082D-03	1.475012D-03	1.489233D-03	1.503917D-03
18	1.044167D-03	1.060553D-03	1.077173D-03	1.094023D-03	1.111085D-03
19	6.777551D-04	6.891808D-04	7.007710D-C4	7.125203D-04	7.244225D-04
20	3.761309D-04	3.831054D-04	3.902153D-04	3.974568D-04	4.048285D-04
21	1.961461D-04	2.001084D-04	2.041743D-04	2.083397D-04	2.126030D-04
22	6.665880D-05	6.243217D-C5	6.427498D-05	6.618443D-05	6.815750D-05
23	5.261160D-06	5.997072D-06	6.773285D-06	7.588229D-06	8.440423D-06
24	1.297941D-06	1.486306D-06	1.685271D-06	1.894424D-06	2.113376D-06

A-L COEFFICIENTS FOR (0,1 TO 0,3) TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	2.361501D 00	2.386354D 00	2.451244D 00	2.534092D 00	2.624031D 00
1	-4.030620D-01	-5.400853D-01	-6.664659D-C1	-7.887479D-01	-9.111965D-01
2	-6.744428D-01	-5.674769D-01	-4.683114D-01	-3.627281D-01	-2.439555D-01
3	7.190507D-02	5.344667D-02	2.955229D-02	-1.147161D-03	-3.896189D-02
4	3.607064D-01	3.774485C-01	4.089465D-01	4.500465D-01	4.978647D-01
5	-1.142394D-01	-1.163861D-01	-1.194304D-01	-1.230267D-01	-1.270013D-01
6	-2.183867D-02	-2.013952D-02	-1.946382D-02	-1.953911D-02	-2.013536D-02
7	2.027836D-02	2.229118C-02	2.373524D-02	2.469579D-02	2.531787D-02
8	-4.181078D-02	-4.185698D-02	-4.272895D-02	-4.411995D-02	-4.579633D-02
9	-3.061807D-02	-3.201980C-02	-3.441156D-02	-3.745887D-02	-4.090168D-02
10	-3.007699D-02	-3.019873D-02	-3.080392D-02	-3.170554D-02	-3.274208D-02
11	-1.898432D-02	-1.889873D-02	-1.924309D-C2	-1.987377D-02	-2.067626D-02
12	-3.253601D-03	-3.596078D-03	-4.215992D-03	-5.017062D-03	-5.921417D-03
13	-1.607434D-03	-2.434967D-03	-3.283071D-03	-4.143022D-03	-5.001891D-03
14	-1.972452D-04	-7.911958D-04	-1.409628D-03	-2.047613D-03	-2.697466D-03
15	2.188269D-03	2.213099C-03	2.250242D-03	2.299311D-03	2.360136D-03
16	2.020320D-03	2.076513D-03	2.139351D-C3	2.207880D-03	2.281443D-03
17	1.580381D-03	1.662591D-03	1.749686D-03	1.840954D-03	1.935839D-03
18	1.199536D-03	1.292567D-03	1.389513D-C3	1.489807D-03	1.593000D-03
19	7.860404D-04	8.508231D-04	9.183204D-04	9.881620D-04	1.062047D-03
20	4.434364D-04	4.846235D-04	5.280166D-04	5.733534D-04	6.203836D-04
21	2.352443D-04	2.598361D-04	2.860954D-04	3.137976D-04	3.427566D-04
22	7.890134D-05	9.093617D-05	1.040733D-04	1.181648D-04	1.330940D-04
23	1.321412D-05	1.874170D-C5	2.491240D-C5	3.164019D-05	3.885674D-05
24	3.342971D-06	4.770859D-06	6.367907D-06	8.111492D-06	9.983655D-06

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	2.715066D 00	2.803696D 00	2.887776D 00	3.036926D 00	3.155827D 00
1	-1.036075D 00	-1.164564D 00	-1.297162D 00	-1.573961D 00	-1.861769D 00
2	-1.026346D-01	4.439745C-02	2.148229D-01	6.017795D-01	1.033967D 00
3	-8.376230D-02	-1.350832C-01	-1.922501D-01	-3.209029D-01	-4.631150D-01
4	5.505317D-01	6.067246C-01	6.653645D-01	7.864325D-01	9.075787D-01
5	-1.312352D-01	-1.356516C-01	-1.401815D-01	-1.493794D-01	-1.584588D-01
6	-2.109610D-02	-2.233587D-02	-2.377363D-02	-2.699453D-02	-3.029834D-02
7	2.567989D-02	2.584594C-02	2.586175D-02	2.565627D-02	2.530113D-02
8	-4.762031D-02	-4.947018C-02	-5.125226D-02	-5.432926D-02	-5.639047D-02
9	-4.455681D-02	-4.828373D-02	-5.195922D-02	-5.881938D-02	-6.455119D-02
10	-3.380670D-02	-3.482246C-02	-3.572613D-02	-3.700387D-02	-3.733459D-02
11	-2.157318D-02	-2.250338C-02	-2.341391D-02	-2.501657D-02	-2.612922D-02
12	-6.873792D-03	-7.830902D-03	-8.756212D-03	-1.039554D-02	-1.160020D-02
13	-5.844845D-03	-6.657372C-03	-7.424476D-03	-8.762393D-03	-9.747091D-03
14	-3.350046D-03	-3.995924D-03	-4.625545D-03	-5.796208D-03	-6.788674D-03
15	2.432830D-03	2.517624C-03	2.614647D-03	2.848333D-03	3.139254D-03
16	2.359534D-03	2.441770D-03	2.527592D-03	2.710311D-03	2.907152D-03
17	2.033864D-03	2.134674C-03	2.237825D-03	2.450893D-03	2.672089D-03
18	1.698705D-03	1.806629C-03	1.916399D-03	2.141160D-03	2.372068D-03
19	1.133688D-03	1.208901C-03	1.285453D-03	1.442278D-03	1.603497D-03
20	6.688949D-04	7.187328C-04	7.697452D-04	8.748631D-04	9.836281D-04
21	3.728603D-04	4.039590D-04	4.359541D-04	5.023097D-04	5.714339D-04
22	1.487660D-04	1.651023D-04	1.820375D-04	2.174926D-04	2.547759D-04
23	4.650659D-05	5.454397D-05	6.293076D-C5	8.062804D-05	9.939116D-05
24	1.196981D-05	1.405791C-05	1.623794D-05	2.084107D-05	2.572473D-05

A-L COEFFICIENTS FOR (0,1 TO 0,5) TRANSITION

L	0.10 EV	0.20 EV	0.30 EV	0.40 EV	0.50 EV
0	2.184647D-04	2.649601E-04	3.421172D-04	4.922928D-04	7.969569D-04
1	2.611896D-04	2.714873C-04	2.707083D-04	2.542019D-04	2.036515D-04
2	2.649838D-04	2.858262D-04	3.272618D-04	3.961869D-04	5.096133D-04
3	1.459432D-04	1.585311C-04	1.600921D-04	1.600270D-04	1.315378D-04
4	-3.889314D-05	6.922054D-06	5.372543D-05	1.180940D-04	2.005067D-04
5	-1.232893D-04	-1.212370D-04	-1.164627D-04	-1.027913D-04	-6.678474D-05
6	-1.841125D-04	-7.554254C-05	4.173409D-05	2.129616D-04	4.623080D-04
7	-2.601611D-04	-2.216244D-04	-1.893781D-04	-1.359083D-04	-5.944058D-05
8	-1.211411D-04	-7.871382D-05	-3.525028D-05	2.024201D-05	9.740912D-05
9	-1.406202D-05	-2.134071C-06	1.5873C0D-06	-2.674644D-06	-1.872213D-05
10	4.709571D-05	5.902012C-05	6.795054D-05	7.302453D-05	6.350221D-05
11	1.137267D-04	1.223271C-04	1.263239D-04	1.280944D-04	1.214022D-04
12	2.692018D-04	2.747083C-04	2.798487D-04	2.827232D-04	2.832783D-04
13	1.742697D-04	1.827361D-04	1.901579D-04	1.975966D-04	2.090450D-04
14	8.183576D-05	8.841527D-05	9.358819D-05	9.848724D-05	1.041949D-04
15	-4.374557D-05	-4.762387D-05	-5.048607D-05	-5.245241D-05	-5.555663D-05
16	-6.740187D-05	-6.913894C-05	-7.057292D-05	-7.141362D-05	-7.254155D-05
17	2.989071D-05	2.885616C-05	2.769327D-05	2.656529D-05	2.547324D-05
18	2.838751D-05	3.173916C-05	3.389991D-05	3.556314D-05	3.688302D-05
19	3.849775D-06	8.157232C-06	1.112798D-05	1.354019D-05	1.555277D-05
20	4.021837D-06	5.790124D-06	7.133017D-06	8.322792D-06	9.382098D-06
21	6.585574D-06	6.697203C-06	6.851543D-06	7.036945D-06	7.233135D-06
22	1.087864D-05	9.492064C-06	8.547928D-06	7.831147D-06	7.259067D-06
23	7.065830D-06	5.970952D-06	5.200635D-06	4.598130D-06	4.102965D-06
24	1.634868D-06	1.276775D-06	1.096969D-06	9.576560D-07	8.442436D-07

L	0.60 EV	0.70 EV	0.80 EV	0.90 EV	1.00 EV
0	1.379546D-03	2.425684C-03	4.217651D-03	7.195799D-03	1.204432D-02
1	1.475904D-04	5.436C46C-05	-9.307203D-05	-2.987091D-04	-5.746947D-04
2	7.768508D-04	1.231480D-03	2.025424D-03	3.275417D-03	5.335723D-03
3	1.470133D-04	1.400073D-04	1.291238D-04	1.159598D-04	1.017536D-04
4	3.498519D-04	5.431910D-04	7.997883D-04	1.139254D-03	1.592981D-03
5	-2.205646D-05	4.972765D-05	1.459728D-04	2.736613D-04	4.386297D-04
6	7.997340D-04	1.253508D-03	1.830284D-03	2.557422D-03	3.479240D-03
7	5.830186D-05	2.113810D-04	4.090899D-04	6.621637D-04	9.824001D-04
8	2.125257D-04	3.597318C-04	5.458129D-04	7.807214D-04	1.078109D-03
9	-3.129447D-05	-5.833348C-05	-9.781833D-05	-1.520332D-04	-2.240622D-04
10	6.661502D-05	5.887924C-05	4.625869D-05	2.730668D-05	1.447685D-07
11	1.173189D-04	1.050271C-04	8.470775D-05	5.425983D-05	1.119319D-05
12	2.802133D-04	2.774666C-04	2.683428D-04	2.534605D-04	2.335163D-04
13	2.159295D-04	2.270291D-04	2.383147D-04	2.504912D-04	2.645193D-04
14	1.099234D-04	1.164530C-04	1.230257D-04	1.299200D-04	1.376157D-04
15	-5.584280D-05	-5.721886D-05	-5.789989D-05	-5.824348D-05	-5.863497D-05
16	-7.266843D-05	-7.304804C-05	-7.327151D-05	-7.336466D-05	-7.345528D-05
17	2.444210D-05	2.365387D-05	2.254334D-05	2.133929D-05	2.023453D-05
18	3.794132D-05	3.893884C-05	3.966325D-05	4.023951D-05	4.074960D-05
19	1.727298D-05	1.877904D-05	2.012510D-05	2.133819D-05	2.242906D-05
20	1.035963D-05	1.127557C-05	1.213601D-05	1.295805D-05	1.374497D-05
21	7.442566D-06	7.668225D-06	7.892170D-06	8.121995D-06	8.355860D-06
22	6.791033D-06	6.403560C-06	6.075857D-06	5.799007D-06	5.554218D-06
23	3.684035D-06	3.322903C-06	3.007553D-06	2.729643D-06	2.482822D-06
24	7.492194D-07	6.681356D-07	5.980894D-07	5.370665D-07	4.835948D-07

A-L COEFFICIENTS FOR (0.1 TO 0.5) TRANSITION

L	1.10 EV	1.20 EV	1.30 EV	1.40 EV	1.50 EV
0	1.978638D-02	3.235874D-02	5.272225D-02	8.648585D-02	1.443145D-01
1	-9.253669D-04	-1.405850D-03	-2.006861D-03	-2.769673D-03	-3.725723D-03
2	8.610044D-03	1.390512D-02	2.245271D-02	3.656249D-02	6.064933D-02
3	8.773312D-05	7.588160D-05	7.000232D-05	7.627461D-05	1.056197D-04
4	2.198172D-03	3.035655D-03	4.204259D-03	5.885872D-03	8.413216D-03
5	6.496014D-04	9.246406C-04	1.280654D-C3	1.749057D-03	2.377635D-03
6	4.632623D-03	6.108187C-03	7.991972D-03	1.044393D-02	1.370400D-02
7	1.384284D-03	1.898991D-03	2.556654D-03	3.412483D-03	4.550472D-03
8	1.450584D-03	1.927323D-03	2.536873D-03	3.329891D-03	4.385425D-03
9	-3.181124D-04	-4.426427D-04	-6.058385D-04	-8.236316D-04	-1.119138D-03
10	-3.732654D-05	-8.788318D-05	-1.558891D-04	-2.482240D-04	-3.749764D-04
11	-4.785885D-05	-1.289443C-04	-2.390132D-04	-3.893673D-04	-5.978744D-04
12	2.063733D-04	1.690941C-04	1.183136D-04	4.906741D-05	-4.693760D-05
13	2.803377D-04	2.984572D-04	3.193983D-04	3.441705D-04	3.743615D-04
14	1.460458D-04	1.554253D-04	1.659936D-04	1.781127D-04	1.924827D-04
15	-5.895357D-05	-5.915727D-05	-5.924168D-05	-5.926915D-05	-5.921724D-05
16	-7.350232D-05	-7.347931D-05	-7.341438D-05	-7.330620D-05	-7.315997D-05
17	1.918177D-05	1.812054C-05	1.706528D-05	1.602170D-05	1.497242D-05
18	4.119148D-05	4.156047C-05	4.186184D-05	4.210810D-05	4.230392D-05
19	2.342662D-05	2.433799C-05	2.517432D-05	2.594553D-05	2.665577D-05
20	1.450313D-05	1.523748D-05	1.594727D-05	1.663842D-05	1.731109D-05
21	8.594914D-06	8.836003C-06	9.081214D-06	9.328605D-06	9.578777D-06
22	5.364636D-06	5.196033C-06	5.055530D-06	4.939539D-06	4.845333D-06
23	2.262427D-06	2.065111C-06	1.888132D-06	1.729239D-06	1.586452D-06
24	4.365706D-07	3.951304C-07	3.585896D-07	3.263920D-07	2.980814D-07

L	1.60 EV	1.70 EV	1.80 EV	1.90 EV	2.00 EV
0	2.490105D-01	4.561785C-01	9.276571D-01	2.157138D 00	2.592823D 00
1	-4.898502D-03	-6.266775D-03	-6.988165D-03	-1.403197D-03	2.398555D-02
2	1.041318D-01	1.899431C-01	3.846890D-01	8.904489D-01	1.061420D-00
3	1.785370D-04	3.344161C-04	7.105185D-04	1.669000D-03	2.222412D-03
4	1.245859D-02	1.955428C-02	3.378600D-02	6.525505D-02	6.152535D-02
5	3.247785D-03	4.502222D-03	6.363989D-03	8.219280D-03	8.547662D-04
6	1.818426D-02	2.461474C-02	3.412022D-02	4.369735D-02	6.985556D-03
7	6.113208D-03	8.352383C-03	1.165632D-02	1.494570D-02	2.044676D-03
8	5.836190D-03	7.919904D-03	1.100079D-02	1.410174D-02	2.199814D-03
9	-1.531362D-03	-2.132251D-03	-3.031383D-03	-3.968307D-03	-5.917602D-04
10	-5.540213D-04	-8.168592C-04	-1.214405D-03	-1.634577D-03	-1.397933D-04
11	-8.639183D-04	-1.331643D-03	-1.996491D-03	-2.720797D-03	-3.660520D-04
12	-1.832143D-04	-3.846648C-04	-6.904693D-04	-1.022417D-03	7.175157D-05
13	4.126044D-04	4.635790C-04	5.334280D-04	5.896827D-04	2.730565D-04
14	2.101305D-04	2.330197D-04	2.636115D-04	2.886136D-04	1.610776D-04
15	-5.509089D-05	-5.891394D-05	-5.867474D-05	-5.839594D-05	-5.804661D-05
16	-7.299309D-05	-7.280438C-05	-7.257322D-05	-7.233130D-05	-7.205295D-05
17	1.393702D-05	1.288454C-05	1.184975D-05	1.080379D-05	9.770596D-06
18	4.245929D-05	4.256411C-05	4.263837D-05	4.267219D-05	4.267893D-05
19	2.731913D-05	2.792746C-05	2.849642D-05	2.902114D-05	2.951256D-05
20	1.796869D-05	1.861074D-05	1.924040D-05	1.985735D-05	2.046356D-05
21	9.830645D-06	1.008496C-05	1.034063D-05	1.059810D-05	1.085747D-05
22	4.770910D-06	4.714333C-06	4.674012D-06	4.648692D-06	4.637564D-06
23	1.458187D-06	1.343098D-06	1.240045D-06	1.148041D-06	1.066317D-06
24	2.732752D-07	2.516471D-07	2.329234D-07	2.168651D-07	2.032617D-07

A-L COEFFICIENTS FOR (0.1 TO 0.5) TRANSITION

L	2.05 EV	2.10 EV	2.15 EV	2.20 EV	2.25 EV
0	1.220266D 00	5.985295C-01	7.422723D-01	1.585625D 00	3.264295D 00
1	2.085832D-02	1.279181D-02	8.265074D-03	9.781100D-03	2.184822D-02
2	4.948254D-01	2.401051D-01	3.005587D-01	6.484230D-01	1.339166D 00
3	1.443752D-03	1.221438D-03	1.570441D-03	2.372550D-03	3.390464D-03
4	2.582803D-02	1.473187D-02	2.292676D-02	4.663622D-02	8.550033D-02
5	-1.568722D-03	3.697810D-05	2.624553D-03	4.944966D-03	5.119306D-03
6	-5.240347D-03	2.824109D-03	1.590853D-02	2.772713D-02	2.879777D-02
7	-2.186559D-03	6.564474D-04	5.220550D-03	9.311110D-03	9.624360D-03
8	-1.146870D-03	8.850165D-04	5.140768D-03	8.978427D-03	9.304964D-03
9	5.654672D-04	-1.921963D-04	-1.444519D-03	-2.594853D-03	-2.721794D-03
10	3.270153D-04	6.051812D-05	-4.908409D-04	-1.002923D-03	-1.071575D-03
11	4.705892D-04	-8.663700D-05	-1.025805D-03	-1.907513D-03	-2.025516D-03
12	4.607280D-04	2.061040D-04	-2.242574D-04	-6.282477D-04	-6.838054D-04
13	1.819009D-04	2.430361D-04	3.320094D-04	4.034043D-04	3.997461D-04
14	1.248598D-04	1.509924D-04	1.884590D-04	2.186649D-04	2.180059D-04
15	-5.782109D-05	-5.763086D-05	-5.742899D-05	-5.721693D-05	-5.700329D-05
16	-7.193449D-05	-7.179084D-05	-7.163703D-05	-7.147852D-05	-7.132409D-05
17	9.221932D-06	8.703247D-06	8.189161D-06	7.675920D-06	7.155426D-06
18	4.265750D-05	4.264099D-05	4.261971D-05	4.259224D-05	4.255482D-05
19	2.974446D-05	2.996813D-05	3.018513D-05	3.039464D-05	3.059451D-05
20	2.076246D-05	2.105886D-05	2.135349D-05	2.164540D-05	2.193510D-05
21	1.098795D-05	1.111850D-05	1.124940D-05	1.138095D-05	1.151289D-05
22	4.636866D-06	4.639195C-06	4.644499D-06	4.652829D-06	4.663868D-06
23	1.029064D-06	9.940781D-07	9.612981D-07	9.306288D-07	9.019886D-07
24	1.973242D-07	1.919344D-07	1.870728D-07	1.827216D-07	1.788623D-07

L	2.30 EV	2.35 EV	2.40 EV	2.45 EV	2.50 EV
0	4.832372D 00	4.125345C 00	2.434917D 00	1.317937D 00	9.085415D-01
1	4.323203D-02	5.010855C-02	4.050676D-02	3.045536D-02	2.544785D-02
2	1.983105D 00	1.690669D 00	9.943599D-01	5.340245D-01	3.642731D-01
3	3.417744D-03	1.802377D-03	5.756744D-04	3.597714D-04	8.222023D-04
4	1.117750D-01	8.351141D-02	4.249295D-02	2.022296D-02	1.550303D-02
5	-1.008518D-04	-6.574698D-03	-7.798261D-03	-6.019526D-03	-3.561476D-03
6	2.600147D-03	-3.015349D-02	-3.641215D-02	-2.746863D-02	-1.501320D-02
7	4.553700D-04	-1.090310D-02	-1.302608D-02	-9.873932D-03	-5.531823D-03
8	7.421406D-04	-9.933971D-03	-1.196514D-02	-9.034249D-03	-4.962833D-03
9	-1.887104D-04	3.030096D-03	3.679547D-03	2.818057D-03	1.590885D-03
10	3.016901D-05	1.451933D-03	1.752292D-03	1.383641D-03	8.481537D-04
11	-9.581930D-05	2.402951D-03	2.930458D-03	2.270688D-03	1.307439D-03
12	1.544983D-04	1.333637D-03	1.574693D-03	1.275960D-03	8.390184D-04
13	2.352146D-04	5.319568D-05	3.158010D-05	8.914342D-05	1.569201D-04
14	1.513556D-04	7.776535D-05	7.006112D-05	9.484355D-05	1.237473D-04
15	-5.676966D-05	-5.650964D-05	-5.609391D-05	-5.581015D-05	-5.554505D-05
16	-7.115843D-05	-7.098499D-05	-7.075655D-05	-7.056893D-05	-7.039020D-05
17	6.636723D-06	6.117575D-06	5.569975D-06	5.047845D-06	4.526752D-06
18	4.251166D-05	4.246203D-05	4.239482D-05	4.233210D-05	4.226448D-05
19	3.078783D-05	3.097426D-05	3.115386D-05	3.132573D-05	3.149134D-05
20	2.222263D-05	2.250839D-05	2.279232D-05	2.307384D-05	2.335380D-05
21	1.164501D-05	1.177729C-05	1.190972D-05	1.204247D-05	1.217548D-05
22	4.677488D-06	4.693624C-06	4.712157D-06	4.733058D-06	4.756330D-06
23	8.753155D-07	8.505281C-07	8.275492D-07	8.063311D-07	7.868598D-07
24	1.754789D-07	1.725571D-07	1.700815D-07	1.680381D-07	1.664141D-07

A-L COEFFICIENTS FOR {0.1 TO 0.5} TRANSITION

L	2.55 EV	2.60 EV	2.65 EV	2.70 EV	2.75 EV
0	1.262323D 00	2.422531C 00	3.405776D 00	3.189281D 00	2.439057D 00
1	2.815771D-02	4.045004D-02	5.216348D-02	5.073340D-02	4.277790D-02
2	5.079893D-01	9.844086D-01	1.391260D 00	1.305712D 00	9.988543D-01
3	1.663851D-03	2.124240D-03	1.104818D-03	-5.258527D-04	-1.528368D-03
4	2.721463D-02	5.253175D-02	6.762059D-C2	5.683206D-02	3.870278D-02
5	-1.746059D-03	-2.645808C-03	-6.818817D-03	-9.935751D-03	-1.034986D-02
6	-5.736462D-03	-1.016607D-02	-3.126004D-C2	-4.712003D-02	-4.926184D-02
7	-2.328008D-03	-3.902325D-03	-1.123059D-02	-1.668835D-02	-1.737717D-02
8	-1.942439D-03	-3.421751D-03	-1.035930D-02	-1.556222D-02	-1.625876D-02
9	6.650623D-04	1.113177D-03	3.264456D-C3	4.909120D-03	5.161364D-03
10	4.369867D-04	6.2010080C-04	1.551860D-03	2.274845D-03	2.393449D-03
11	5.716926D-04	9.387502C-04	2.702232D-03	4.072072D-03	4.305230D-03
12	5.040128D-04	6.660307C-04	1.458385D-C3	2.075015D-03	2.179854D-03
13	2.021497D-04	1.838828C-04	1.036099D-04	5.576900D-05	6.298556D-05
14	1.423513D-04	1.366169C-04	1.043954D-C4	8.574203D-05	8.995768D-05
15	-5.507954D-05	-5.477768D-05	-5.446532D-05	-5.415224D-05	-5.382638D-05
16	-7.006890D-05	-6.986655C-05	-6.966375D-05	-6.946413D-05	-6.926000D-05
17	4.012018D-06	3.494837C-06	2.978729D-06	2.459050D-05	1.949810D-06
18	4.219464D-05	4.211822C-05	4.203613D-C5	4.194822D-05	4.185548D-05
19	3.165084D-05	3.180445C-05	3.195238D-05	3.209444D-05	3.223061D-05
20	2.363210D-05	2.390845C-05	2.418229D-05	2.445519D-05	2.472510D-05
21	1.230869D-05	1.244215C-05	1.257570D-C5	1.270963D-05	1.284367D-05
22	4.781952D-06	4.809820C-06	4.839768D-06	4.871901D-06	4.916009D-06
23	7.690844D-07	7.529493C-07	7.384130D-C7	7.254283D-07	7.139520D-07
24	1.651976D-07	1.643742C-07	1.639351D-07	1.638686D-07	1.641644D-07

L	2.80 EV	2.85 EV	2.90 EV	2.95 EV	3.00 EV
0	1.767204D 00	1.336202C 00	1.230907D C0	1.494684D 00	1.878873D 00
1	3.575480D-02	3.194709C-02	3.246199D-02	3.694359D-02	4.091054D-02
2	7.224298D-01	5.437581C-01	4.983416D-01	6.055970D-01	7.65C233D-01
3	-1.741840D-03	-1.499239D-03	-1.101738D-03	-1.038506D-03	-1.686836D-03
4	2.492791D-02	1.743678C-02	1.692253D-02	2.292214D-02	2.951266D-02
5	-9.395749D-03	-8.078863C-03	-7.105743D-03	-7.278766D-03	-8.637911D-03
6	-4.446619D-02	-3.779494D-02	-3.282888D-02	-3.366605D-02	-4.056491D-02
7	-1.567577D-02	-1.334227C-02	-1.161581D-02	-1.190581D-02	-1.428130D-02
8	-1.468142D-02	-1.249306C-02	-1.087153D-C2	-1.116443D-02	-1.345331D-02
9	4.696289D-03	4.029332C-03	3.531425D-03	3.635633D-03	4.379277D-03
10	2.196621D-03	1.908262C-03	1.689353D-03	1.731549D-03	2.050007D-03
11	3.542683D-03	3.405338C-03	3.003856D-03	3.109288D-03	3.762366D-03
12	2.016763D-03	1.774907C-03	1.593338D-03	1.638389D-03	1.928013D-03
13	9.255440D-05	1.242920C-04	1.473299D-04	1.533589D-04	1.469106D-04
14	1.033016D-04	1.174845C-04	1.280072D-04	1.314623D-04	1.296746D-04
15	-5.350544D-05	-5.318142D-05	-5.285179D-C5	-5.251584D-05	-5.217712D-05
16	-6.905057D-05	-6.884111D-05	-6.862950D-C5	-6.848926D-05	-6.827224D-05
17	1.426388D-06	9.101647C-07	3.937464D-07	-1.559730D-07	-6.714167D-07
18	4.176016D-05	4.165958C-05	4.155388D-05	4.141977D-05	4.130586D-05
19	3.236212D-05	3.248827C-05	3.260920D-05	3.272973D-05	3.284055D-05
20	2.499558D-05	2.526347C-05	2.552956D-05	2.579104D-05	2.605449D-05
21	1.297769D-05	1.311224C-05	1.324706D-C5	1.337902D-05	1.351419D-05
22	4.542079D-06	4.980226C-06	5.020251D-06	5.060662D-06	5.104314D-06
23	7.039438D-07	6.953648C-07	6.881753D-07	6.823394D-07	6.778250D-07
24	1.648130D-07	1.658051D-07	1.671309D-C7	1.687815D-07	1.707500D-07

A-L COEFFICIENTS FOR (0.1 TO 0.5) TRANSITION

L	3.10 EV	3.20 EV	3.30 EV	3.40 EV	3.50 EV
0	1.923261D 00	1.523066D 00	1.245061D C0	1.226903D 00	1.255747D 00
1	3.687802D-02	2.951862D-02	2.611388D-02	2.595216D-02	2.396350D-02
2	7.890217D-01	6.268001C-01	5.122153D-01	5.047406D-01	5.188304D-01
3	-3.383434D-03	-4.062636C-03	-4.151335D-03	-4.504224D-03	-5.260300D-03
4	2.721951D-02	1.863213D-02	1.368533D-02	1.347451D-02	1.359951D-02
5	-1.047024D-02	-1.016098D-02	-9.369577D-03	-9.309111D-03	-9.621514D-03
6	-4.998615D-02	-4.801680D-02	-4.402339D-02	-4.378303D-02	-4.569988D-02
7	-1.747232D-02	-1.674484D-02	-1.532226D-02	-1.519636D-02	-1.579974D-02
8	-1.657049D-02	-1.592858D-02	-1.462587D-02	-1.456468D-02	-1.521710D-02
9	5.424633D-03	5.265818C-03	4.881954D-C3	4.897622D-03	5.149581D-03
10	2.505732D-03	2.440569C-03	2.272803D-03	2.275971D-03	2.380960D-03
11	4.704058D-03	4.610906C-03	4.312720D-03	4.362757D-03	4.622215D-03
12	2.346486D-03	2.303431D-03	2.168402D-03	2.187873D-03	2.300488D-03
13	1.525602D-04	1.810688D-04	2.075174D-04	2.280591D-04	2.480579D-04
14	1.340233D-04	1.476431D-04	1.608004D-04	1.715153D-04	1.822323D-04
15	-5.146041D-05	-5.076686D-05	-5.010038D-05	-4.933166D-05	-4.856090D-05
16	-6.782184D-05	-6.735996D-05	-6.691551D-C5	-6.644427D-05	-6.598095D-05
17	-1.700064D-06	-2.722900C-06	-3.761025D-06	-4.790411D-06	-5.828895D-06
18	4.106734D-05	4.081272D-05	4.054314D-05	4.026047D-05	3.996316D-05
19	3.304845D-05	3.323852C-05	3.341115D-05	3.356812D-05	3.370878D-05
20	2.657675D-05	2.709385D-05	2.760553D-05	2.811215D-05	2.861424D-05
21	1.378511D-05	1.405689D-05	1.432925D-05	1.460217D-05	1.487583D-05
22	5.196857D-06	5.296127C-06	5.401738D-06	5.513359D-06	5.630808D-06
23	6.726272D-07	6.723345C-07	6.767139D-07	6.855580D-07	6.986701D-07
24	1.756075D-07	1.816444D-07	1.888033D-07	1.970357D-07	2.062940D-07

L	3.60 EV	3.70 EV	3.80 EV	3.90 EV	4.00 EV
0	1.189914D 00	1.093192C 00	1.008248D 00	9.509576D-01	9.130861D-01
1	2.034218D-02	1.696977C-02	1.431514D-02	1.217700D-02	1.004385D-02
2	4.940817D-01	4.558588C-01	4.219527D-01	3.993670D-01	3.848785D-01
3	-5.896902D-03	-6.291037D-03	-6.630594D-03	-6.988257D-03	-7.434108D-03
4	1.212300D-02	1.028369D-02	8.804274D-03	7.953761D-03	7.305613D-03
5	-9.643780D-03	-9.372448D-03	-9.133905D-03	-8.966323D-03	-8.924481D-03
6	-4.588090D-02	-4.489416C-02	-4.370395D-02	-4.286831D-02	-4.243496D-02
7	-1.580981D-02	-1.540715C-02	-1.494928D-02	-1.461875D-02	-1.442388D-02
8	-1.529380D-02	-1.498215D-02	-1.460355D-02	-1.434893D-02	-1.421982D-02
9	5.212040D-03	5.143295C-03	5.049838D-03	4.995121D-03	4.982760D-03
10	2.404473D-03	2.372187C-03	2.327919D-03	2.298252D-03	2.287709D-03
11	4.712415D-03	4.681699C-03	4.625729D-03	4.602759D-03	4.617545D-03
12	2.338298D-03	2.323016C-03	2.296503D-03	2.284671D-03	2.289405D-03
13	2.691028D-04	2.887590C-04	3.068822D-04	3.247421D-04	3.418842D-04
14	1.931004D-04	2.038767D-04	2.137181D-04	2.235181D-04	2.326624D-04
15	-4.776838D-05	-4.672846C-05	-4.589040D-05	-4.499970D-05	-4.427634D-05
16	-6.550197D-05	-6.497749C-05	-6.446786D-05	-6.393592D-05	-6.342191D-05
17	-6.852989D-06	-7.865777C-06	-8.889764D-06	-9.911211D-06	-1.093323D-05
18	3.965439D-05	3.933172C-05	3.899754D-C5	3.865300D-05	3.829494D-05
19	3.383521D-05	3.394650D-05	3.404400D-05	3.412909D-05	3.420087D-05
20	2.911174D-05	2.960518C-05	3.009414D-05	3.057922D-05	3.106042D-05
21	1.515007D-05	1.542486D-05	1.570013D-05	1.597592D-05	1.625231D-05
22	5.753886D-06	5.882204C-06	6.015647D-06	6.154046D-06	6.297143D-06
23	7.158691D-07	7.369837C-07	7.618571D-07	7.903433D-07	8.223010D-07
24	2.165351D-07	2.277171C-07	2.398028D-07	2.527578D-07	2.665465D-07

A-L COEFFICIENTS FOR (0,1 TO 0,5) TRANSITION

L	4.50 EV	5.00 EV	5.50 EV	6.00 EV	6.50 EV
0	7.573333D-01	6.690976D-01	6.177968D-01	5.864807D-01	5.667393D-01
1	-1.157367D-03	-1.191914D-02	-2.328859D-02	-3.551912D-02	-4.867285D-02
2	3.268743D-01	2.967081D-01	2.823287D-01	2.768389D-01	2.767566D-01
3	-9.401265D-03	-1.134618D-02	-1.337033D-02	-1.546770D-02	-1.762419D-02
4	4.805630D-03	3.683924D-03	3.260063D-03	3.253311D-03	3.539027D-03
5	-8.464440D-03	-8.153192D-03	-7.955586D-03	-7.818064D-03	-7.707139D-03
6	-4.031047D-02	-3.900596D-02	-3.836285D-02	-3.811273D-02	-3.809065D-02
7	-1.342150D-02	-1.268780D-02	-1.215515D-02	-1.173291D-02	-1.136737D-02
8	-1.358643D-02	-1.322960D-02	-1.309680D-02	-1.310326D-02	-1.319029D-02
9	4.902420D-03	4.893308D-03	4.948133D-03	5.040457D-03	5.153389D-03
10	2.221199D-03	2.172416D-03	2.137972D-03	2.106012D-03	2.070279D-03
11	4.652040D-03	4.727344D-03	4.845400D-03	4.986686D-03	5.137854D-03
12	2.298127D-03	2.326060D-03	2.373750D-03	2.432334D-03	2.496123D-03
13	4.183168D-04	4.863233D-04	5.502984D-04	6.121315D-04	6.725531D-04
14	2.766099D-04	3.178734D-04	3.582879D-04	3.987713D-04	4.395397D-04
15	-3.982850D-05	-3.496330D-05	-2.974677D-05	-2.412463D-05	-1.818777D-05
16	-6.074952D-05	-5.794483D-05	-5.500443D-05	-5.188540D-05	-4.866810D-05
17	-1.605889D-05	-2.118622D-05	-2.631431D-05	-3.144617D-05	-3.657643D-05
18	3.635596D-05	3.418832D-05	3.182574D-05	2.930492D-05	2.663530D-05
19	3.438518D-05	3.431232D-05	3.402009D-05	3.353476D-05	3.288263D-05
20	3.341364D-05	3.568919C-05	3.789849D-05	4.005154D-05	4.215476D-05
21	1.764102D-05	1.903985C-05	2.044755D-05	2.186281D-05	2.328475D-05
22	7.077690D-06	7.953853D-06	8.911605D-06	9.940029D-06	1.103046D-05
23	1.029915D-06	1.307832D-06	1.645723D-06	2.035567D-06	2.470988D-06
24	3.469905D-07	4.443402D-07	5.561109D-07	6.803753D-07	8.156019D-07

L	7.00 EV	7.50 EV	8.00 EV	9.00 EV	10.00 EV
0	5.541922D-01	5.463544C-01	5.417019D-01	5.383271D-01	5.393072D-01
1	-6.270309D-02	-7.752022D-02	-9.301136D-02	-1.255054D-01	-1.591110D-01
2	2.802391D-01	2.862067C-01	2.939710D-01	3.131284D-01	3.351573D-01
3	-1.982723D-02	-2.206554C-02	-2.432771D-02	-2.887075D-02	-3.328754D-02
4	4.063089D-03	4.796688D-03	5.723159D-03	8.113107D-03	1.113137D-02
5	-7.602280D-03	-7.488851D-03	-7.356348D-03	-6.980504D-03	-6.389432D-03
6	-3.819943D-02	-3.838602C-02	-3.861450D-02	-3.910867D-02	-3.957025D-02
7	-1.102943D-02	-1.070295C-02	-1.038219D-02	-9.717638D-03	-9.036102D-03
8	-1.332797D-02	-1.349907D-02	-1.369171D-02	-1.411576D-02	-1.456451D-02
9	5.276872D-03	5.404373C-03	5.530520D-03	5.770069D-03	5.972548D-03
10	2.026449D-03	1.971893D-03	1.905192D-03	1.731611D-03	1.501171D-03
11	5.290958D-03	5.440888C-03	5.584124D-03	5.841000D-03	6.047925D-03
12	2.561664D-03	2.626957D-03	2.690738D-03	2.810545D-03	2.917218D-03
13	7.322004D-04	7.909634C-04	8.490896D-04	9.621125D-04	1.070344D-03
14	4.807757D-04	5.226102C-04	5.651335D-04	6.517356D-04	7.405576D-04
15	-1.191889D-05	-5.316863C-06	1.657753D-06	1.648582D-05	3.280775D-05
16	-4.535802D-05	-4.194976C-05	-3.846233D-05	-3.114578D-05	-2.342287D-05
17	-4.170740D-05	-4.684194C-05	-5.198553D-05	-6.228443D-05	-7.257467D-05
18	2.382904D-05	2.089964C-05	1.784386D-05	1.144770D-05	4.667608D-06
19	3.208032D-05	3.114324D-05	3.007949D-05	2.763338D-05	2.480863D-05
20	4.421287D-05	4.623072D-05	4.821183D-05	5.207220D-05	5.582057D-05
21	2.471271D-05	2.614595C-05	2.758345D-05	3.046931D-05	3.336974D-05
22	1.217587D-05	1.337044C-05	1.460935D-05	1.720441D-05	1.993474D-05
23	2.946815D-06	3.458781D-06	4.003329D-06	5.178558D-06	6.453175D-06
24	9.605457D-07	1.114182C-06	1.275555D-06	1.619323D-06	1.986905D-06

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